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ABSTRACT

The 19 papers and three panel discussions on the goals, methods, and evaluation of user education that are presented in this collection draw upon the experiences of librarians of the Scandinavian countries and Great Britain. The principles and practice of user education and its aims and goals in each of the participating nations are presented in seven of the papers, aspects of instructional materials and teaching methods are explored by nine others, and the evaluation of user education, including problems, methods, and practice, are considered by the final three. Interspaced among the three groups of papers are panel discussions on the general themes presented by the papers, and the seminar concludes with a final discussion and recommendations. Included are a list of participants and a list of publications in Swedish by the Chalmers University of Technology Library. (RAA)

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PROCEEDINGS

NVBF ANGLO-SCANDINAVIAN SEMINAR ON LIBRARY USER EDUCATION

November 2-4, 1976
Gothenburg, Sweden

EDITOR: NANCY FJÄLLBRANT

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Nancy Fjällbrant

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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LOCAL ARRANGEMENTS COMMITTEE

Sven Westberg
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Wera From
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PREFACE

In the early autumn of 1974 we were, at Chalmers University of Technology Library, preparing for a seminar on library user education in Swedish academic libraries, sponsored by The Office of the Chancellor of the Swedish universities. This seminar was held in November 1974, and resulted, amongst other things, in plans for another conference, this time extended to include participants from the other Scandinavian countries and Great Britain as it seemed useful to draw on the practical experience, gained in these countries, from user education.

In March 1975, I received a letter from the Director of Libraries, Jyväskylä University, Dr Eeva-Maija Tammekann, at the time President of NVBF - Nordiska Vetenskapliga Bibliotekarieförbundet (Scandinavian Research Librarians' Association) - saying that NVBF would be interested in sponsoring an Anglo-Scandinavian Seminar on user education and asking me if we, at Chalmers, were prepared to arrange such a seminar. This had been suggested at a meeting in Oslo in February 1975 with the board of the Association. Naturally I was very pleased about this and accepted to act as host for a seminar on the proposed theme.

Subsequently we proceeded at Chalmers to make a preliminary programme and cost calculations. On the basis of these Dr Tammekann applied - in August 1975 - for a grant from Nordisk kulturfond (Nordic Culture Fund) and received their positive answer in April 1976. We also made applications to the British Council and received their support for part of the costs of the British participants. I extend my thanks to Nordisk kulturfond and to The British Council for this financial support.

A definite programme was now made and work with the practical arrangements started. The programme was presented and

accepted at a NVBF board meeting in connection with the thirteenth Scandinavian Library Conference in Aalborg, Denmark, in August 1976. It was decided not to have more than 20 to 25 participants in the seminar in order to make it an efficiently working conference.

It was also suggested that, if at all financially possible, we should try to publish the papers presented at the seminar. Consequently we planned from the very start of the proceedings to do so, and at the concluding session of the seminar, on 3 November, it was recommended that the papers presented at the seminar should be published as soon as possible in the form of a 'CTHB-Publikation'.

As the proceedings have now materialized in 'CTHB-Publikation' No. 12, I would like to take the opportunity to extend my sincere thanks to Dr Eeva-Maija Tammekann for the initiative she took in promoting the seminar and for her continued interest and support. I would also like to thank the members of the NVBF board for their positive criticism and useful suggestions.

My thanks are also due to the participants in the seminar and specially those who presented papers or in other ways took an active part in the proceedings. If we achieved anything at this seminar it is thanks to them.

Last but not least I would like to thank my co-members of the local Arrangements Committee and all members of the library staff at Chalmers, who made so much effort to make the seminar a successful one and who have also helped so much in the production of this 'CTHB-Publikation' No. 12.

Sven Westberg

NVBF:s ANGLO-SCANDINAVIAN SEMINAR
ON USER EDUCATION

2-4 November 1976

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THE ROLE OF THE ACADEMIC LIBRARY

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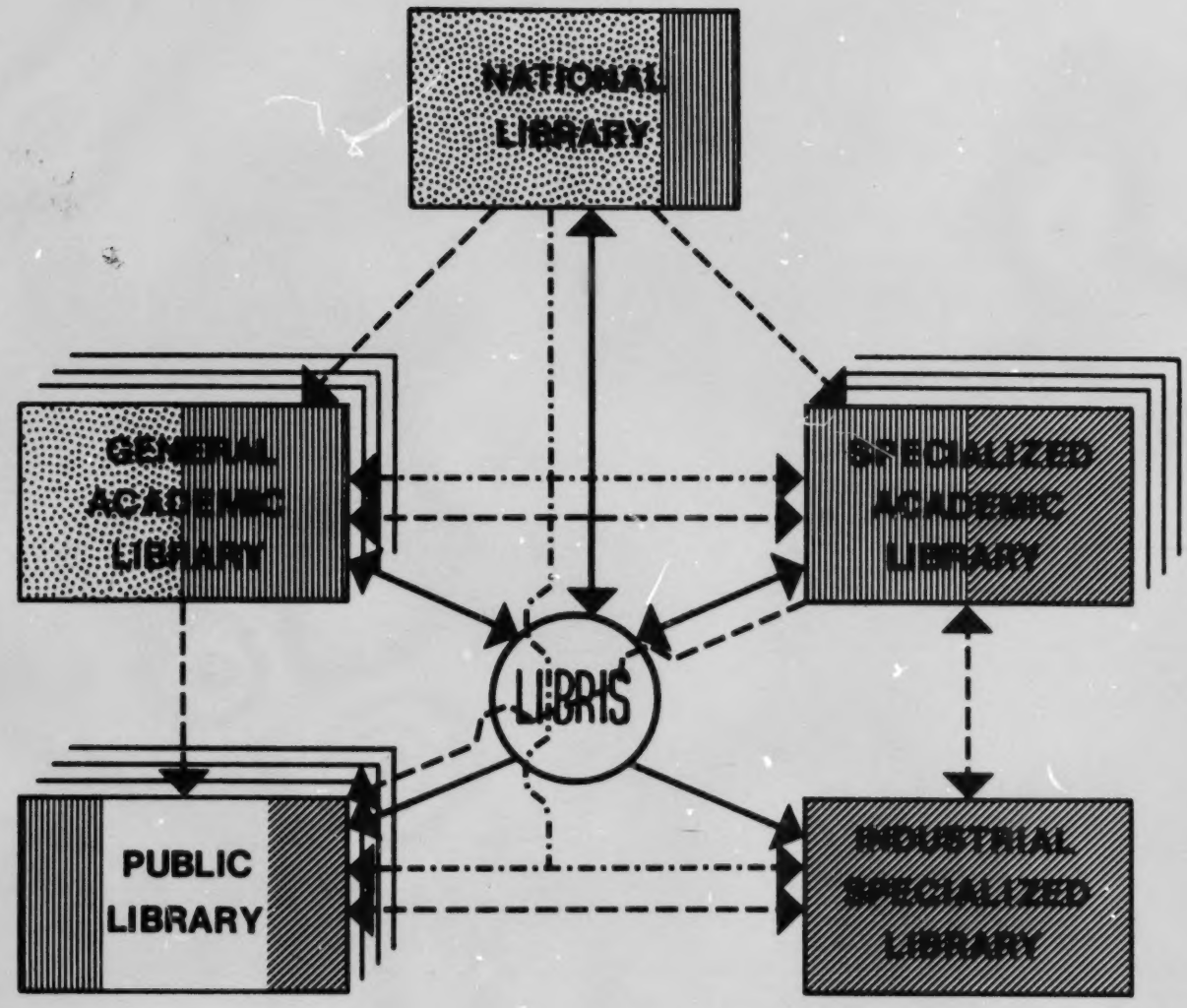
Individual libraries form part of a complex national and international library systems network; different types of libraries exist, to serve the needs of different user groups. Thus, taking Sweden as an example, there are the public libraries - with both educational and recreational functions; general university libraries, such as Gothenburg, Lund and Uppsala - with both depository and educational functions; specialised university libraries, such as Chalmers University of Technology Library - designed to serve the needs of a specialised user category of engineering students and engineers; and specialised libraries designed to serve the needs of user groups within a specific community - for example the specialised industrial libraries, see Fig. 1. These different types of libraries aim to acquire, register and store the information material which is of interest to the users being served.

The general goals for a programme of library user education must be in agreement with the general aims of the university library. These have been expressed as follows by Fjällbrant and Westberg in 1975, (Ref. 1)

1. To contribute to the realisation of the aims of the university, with regard to teaching, learning and research, by acquisition of printed and non-print material necessary to cover present day, and future information needs.
2. To register and store the material acquired in such a way that, it not only permits, but even actually stimulates the use of this material.



DEPOSITORY FUNCTION

EDUCATIONAL FUNCTION

SPECIALIZED LITERATURE FUNCTION

BORROWING/LENDING FLOW

LIBRIS SYSTEM

CHANNELS OF COMMUNICATION

11

Fig 1. The Swedish library system.

3. To adapt these information resources and services to the changing needs of the university and society.
4. To contribute to the integration of both national and international information resources within the university.

During the next three days, we shall consider the development of library user education (See Fig.2) The first day will be devoted to the "Aims and objectives for user education". We shall then go on to consider "The choice of teaching media and methods" and finally, on the third day "Evaluation of user instruction". We hope that this round-table conference will give us the opportunity to exchange ideas and provide stimulation for further work on library user education.

References

1. Fjällbrant, N., & Westberg, S., "Forskningsbibliotekens roll för nya högskolan" BBL Vol. 60(1975)15, p. 276

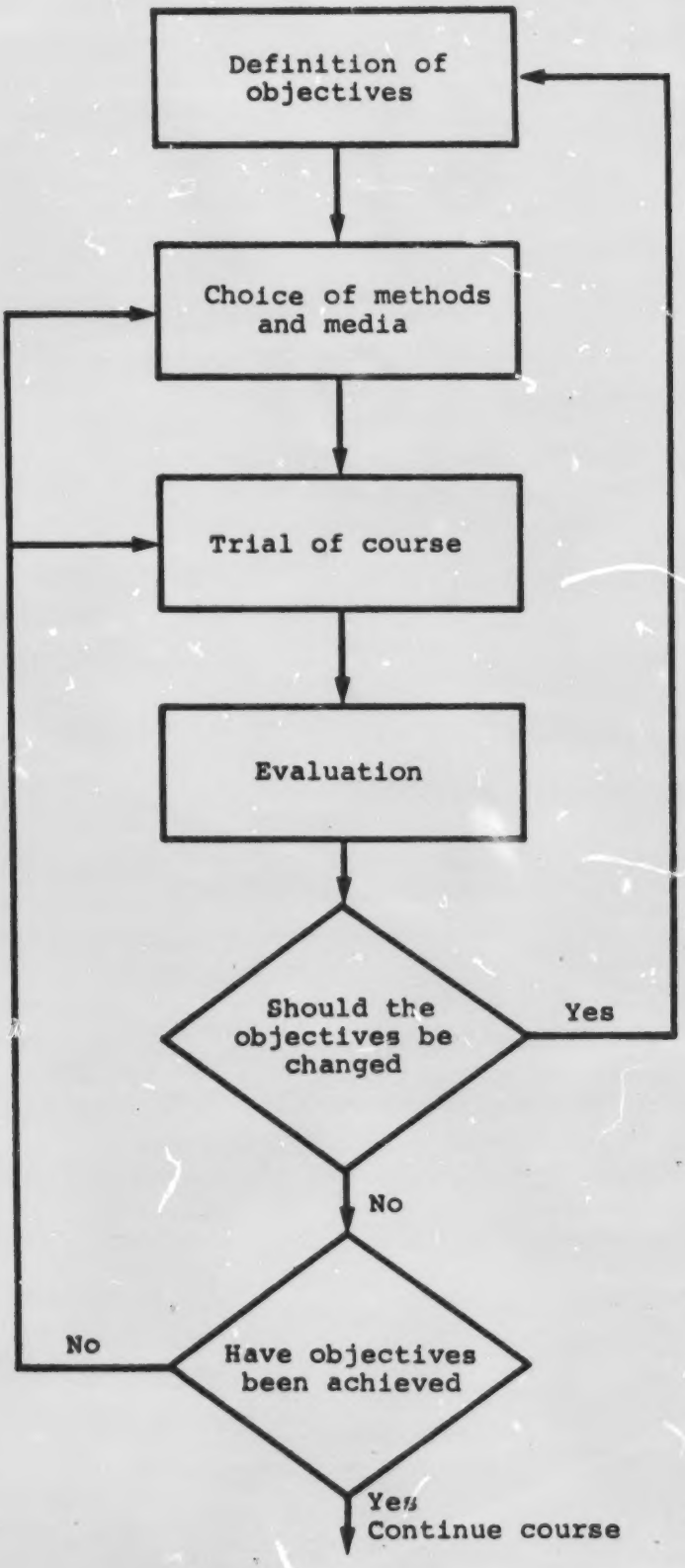


Fig.2. Development of a course of education.

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LIBRARY INSTRUCTION IN DENMARK - A SURVEY

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Most of the available information on library instruction in Denmark since 1970 is in the form of surveys sponsored by various institutions. In most cases, the idea behind this work has been to bring into focus the problems arising from the heterogeneity of present teaching activities at different libraries and teaching institutions, and to suggest ways in which a future coordination might be organised, so that ideas and practices might be exchanged.

The first of these initiatives intended to improve the state of affairs was a round-table conference held at Statsbiblioteket in Aarhus in 1970. On this occasion, reports were presented to illustrate what was being done about user instruction in the largest research libraries, e.g. Det Kongelige Bibliotek (The Royal Library), Statsbiblioteket, Danmarks Tekniske Bibliotek (The Danish Technical Library), as well as at the few educational institutions which were at this time offering courses in library use as part of their curriculum, such as the Department of History at the University of Copenhagen. The outcome of the discussion at this conference was summarised in two points in the report which was subsequently published[1]:

1. A recommendation that the Danish Library Association (Danmarks Biblioteksforening, Gruppe D) or the Joint Council of Danish Research Libraries (Forskningsbibliotekernes Fællesråd) should organise a collection of teaching materials which could be used by all research libraries in the country.

2. A recommendation that these same organisations should contact the appropriate persons or committees at the universities and other schools of higher education in order to start a dialogue about the possibility of integrating library instruction in the various curricula.

The first of these suggestions, the collecting of material, was followed up by an inquiry which the Joint Council of Research Libraries sent out to all Danish research libraries in 1971. On the whole, the replies to this inquiry have not given a very clear picture of what is actually going on in this area. In many cases, the information conveyed by these replies is limited to a few sentences stating which group of users have been offered a course of what length at what time and by whom. In several cases, the content of the course was described simply by the titles of courses, such as "Course in subject bibliography", with no mention of teaching methods or evaluation of the courses. With very few exceptions, no teaching materials, such as compendia, were produced and available for distribution. Interpreting this data, one would be tempted to say that it would be extremely difficult to define a common platform on the basis of which coordination might take place.

The latest survey made in this area is very recent, dating from August 1976, and carried out by the Library Committee of the National Research Council (Forskningsrådenes Biblioteksudvalg).[2] Unfortunately, as pointed out in the introduction to the report, the collection of data for this survey had to be done on a very superficial level, by extrapolating whatever information is given in the official study schedules of the various universities and colleges. Still, what may be concluded from this very rough survey is that library instruction in Denmark is still (as it was in 1970):

1: sporadic in the sense that whether or not any teaching takes place often depends on whether there happens to be a

person around who is interested in offering such courses. No staff are hired to carry out such teaching as their primary assignment. Most often this type of work has third or fourth priority for the staff at research libraries in Denmark. Apart from being sporadic, library instruction also tends to be:

2. Organised arbitrarily in the sense that in many libraries there is no permanent organisational framework for this type of activity. In some cases, the opposite problem emerges, as when a library adopts a rigid schedule for courses of this type and sticks to it year after year without adapting it to the changes in study habits and university curricula that have taken place meanwhile.

However, some changes have taken place in the area of library instruction in the course of the last few years, and I shall mention a few of these. In the first place, two new university centres in Denmark, Aalborg University Centre and Roskilde University Centre, opened in 1973 and 1972,respectively, have started afresh with a type of library instruction that ties in directly to the project work carried out by the student. In the second place, in some subject areas more students are now offered courses in library instruction than was the case in 1970. One might mention the Danish Technical Library, which, starting this year, is offering students of all engineering departments such courses, whereas up till now only a few departments received such offers. These courses are organised in a very flexible way, in a modular structure which allows students to combine course modules to fit their own needs. Still, this improvement in the amount of students being offered courses is more typical of the natural and applied sciences than of the humanities and the social sciences. At the round-table conference mentioned above some optimism was expressed with regard to the teaching of history students: it was hoped that the development in this subject field would, so to speak rub off on the other fields within humanities and the social sciences. But this useful effect has not been noticeable as yet, and one fears that the

favourable development in the field of History is due more to the special problems of historical research than it is in itself an expression of a general trend. On the whole, the tendency in the direction of more offers of library instruction to students in natural and applied sciences is as strong as ever. If one compares the data of the most recent survey with the yearly student statistics issued by the Ministry of Education in Denmark, one finds that whereas about 58% of the students of natural and applied sciences are now offered courses in library use, only about 23% of the humanities and social science students receive such offers.[3]

The type of information that might be gathered from surveys such as the ones mentioned is of course useful in giving a general view of the situation as a whole. But there is little information which might serve as the basis for planning future coordination. This "missing" information in the surveys has to do with teaching methods, evaluation of courses, and, to a lesser degree, with descriptions of contents of courses.

From informal contacts with quite a few teachers of library use in Denmark I have received the impression that there is a great deal of uncertainty about teaching methods. The use of audio-visual media appears to be very limited, and a good deal of scepticism with regard to the usability of such material is often expressed at professional meetings. The traditional teaching method at courses of this type - as well as for other courses in the universities - used to be lecturing; in both areas there has been a general trend in the direction of teaching smaller groups of students in more informal settings, such as teaching sessions based on a combination of introductory talks, group work, and plenary discussion. With respect to evaluation it is probably safe to say that only few courses in library use are formally evaluated. If any evaluating remarks are made, most often they are based on the impression the teacher has of the

degree of success, possibly supplemented by figures to show the level of participation. This means that an important source of feed-back to future activities is missing. In many cases, attempts are made at explaining the low figure of participation or a feeling of failure by the lack of motivation on the part of the students. True, the students do lack motivation in many cases, but this explanation represents a blind alley or vicious circle to the librarian who is not able to establish the contact which might change the outlook of the students who stayed away. One might wonder whether the tough time we are having with the motivational problem is not due to a wrong phrasing: Whether it might not be better to start talking about a relevance problem (as viewed from the point of view of the student) rather than a motivation-problem, which expresses the point of view of the teacher of library use.

Apart from surveys, attempts at bringing about a certain amount of homogeneity and coordination are taking place at other levels as well. To some extent, information and experiences are being shared in informal networks of cooperation on a practical level, though not to the extent that would be desirable. This is likely to be due partly to the fact that most teaching materials used for library instruction are highly context-dependent and cannot be used by others independently of the originator (e.g. OHP-material); and partly to the fact that the needs of different research libraries vary greatly.

Quite another type of intiative taken within the last few years to bring about coordination was an attempt at describing goals and objectives of user instruction, and thus to produce background material for the planning of future activities in this field. This attempt was made in 1974 when a subcommittee under the Committee of Goals and Objectives (Forskningsbibliotekernes Fællesråds Målsætningsudvalg) submitted a report[4] concerning user instruction. This report was intended to serve

as a model proposing the more general and common framework for user education, such as pedagocical principles, structuring of courses and content of courses, so that each library might develop its own version of courses on the basis of a common model. From reactions so far to this report what may be gathered is that it will be useful as a point of departure for a substantial dialogue or discussion among libraries, which in itself is a step in the right direction.

One of the recommendations of this report on goals and objectives deals with the need for theoretical development in the field of "user education" in particular. In fact, such research is being carried out, both by individual researchers and teams, at many institutions, including the Royal Library School which is also organising a central registration of research projects within this field. To mention a few of the topics under investigation without attempting to be exhaustive (complete information including names of researchers may be found in the listings published by Bogens Verden): Several researchers are working in the field of psychological/ pedagocical literature search and documentation. Another group of people are working on the user-librarian negotiation process on an experimental basis. Furthermore, work is being carried out in the field of methodology of literature search in History. And finally, a group of people are working on a project concerning literature search and use in connection with project-organised studies.

References

1. Nielsen, Niels Chr. (red.) Vejledning af studerende i praktisk bibliotekskbenyttelse of fagbibliografi. (Instruction of students in the practical use of libraries and in subject bibliography) Rapport fra møde på Statsbiblioteket i Århus 19 Nov. 1970. (Sammenslutningen af Danmarks Forskningsbibioteker. Publikationer, 2)

2. Forskningsrådenes Biblioteksudvalg, Undervisning i litteratursøgning og bibliotekskundskab ved universiteterne og de højere læreanstalter. En oversigt.,August 1976 (Dupl). Instruction in information searching and the use of libraries in universities and institutions of higher education.

3. It should be borne in mind that the survey is probably not complete, so that these figures are likely to be inexact. However, there is no reason to assume that the information that might be missing is biased, so that the tendency is likely to be correct.

4. Undervisning i litteratursøgning. Et debatoplæg. Betænkning afgivet af Forskningsbibliotekernes Målsætningsudvalgs underudvalg vedr. forskningsbibliotekernes didaktiske forpligtelser og de studerendes biblioteksbetjening. Instruction in information retrieval- Points for discussion. February 1975 (Dupl.)

PAPER I 3 November 2 1976

EXPERIENCE OF LIBRARY INSTRUCTION IN FINLAND - WITH A CASE STUDY FROM HELSINKI UNIVERSITY OF TECHNOLOGY

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Instruction in the use of libraries and in information retrieval is making rapid progress in research libraries in Finland. The activities of research libraries are closely linked with communication of information on research results. The importance of scientific communication continues to grow, and therefore it is important that more attention than hitherto is paid to the use of libraries and information media at all stages of education. For students, an insight into the use of literature and libraries is necessary in connection with all methods of learning, be it group work or self study. This knowledge and its application shortens the time for studies. Looking ahead, instruction in the use of libraries and information media improves the professional abilities of the graduate, diminishes duplication of research efforts and raises the scientific level of research activities.

The aim of instruction in the use of libraries and information media is to give the student the ability to retrieve relevant material for a given assignment. The object of instruction is also to support studying in general and enable the student to use libraries efficiently enough to succeed in every stage of his studies. Timing of the instruction in the use of information media and information services is very important. Since the motivation among the students has an influence on the learning results, this instruction must be linked with concrete learning situations. In practice this leads to postponing this more advanced instruction till the later stages of undergraduate studies.

The present situation in Finland

The first instructional program concerns the use of libraries and is offered in the beginning of the first year of study. There are twenty university libraries in Finland. All of them, but one, offer this introductory course. The courses are principally very similar. After a lecture, a tour of the library is carried out under the guidance of library staff or tutors trained by the library. The length of this course varies from two to four hours. Instruction in the use of information media and information services is regularly included in the teaching programme of the universities of Turku, Oulu, Jyväskylä, Kuopio and Joensuu, as well as within some departments of the University of Helsinki. The same applies to Tampere and Helsinki Universities of Technology. Instruction is given in groups smaller than 40 persons and the course always comprises practical assignments. The length of these courses varies from 10 to 20 hours. Information specialists from the library carry the teaching load partly in co-operation with the teaching staff of the university. In some universities, instruction is obligatory, and in others elective.

In the library of the University of Jyväskla, instruction in the use of the library has been promoted by the renewal of examinations which is underway in all universities in Finland. Obligatory instruction for all students supports the objectives of this renewal programme. The user education forms a part of the instruction concerning the scientific method, and increases the abilities and possiblities for independent work.

All of the above mentioned libraries have, for their courses produced hand-outs for the students; guides to the library, bibliographies etc. Attention has also been paid to the production of audio-visual aids. Some libraries have

video-taped a programme on the use of the library; others have made tape/slide packages. The Central Medical Library and Helsinki University of Technology Library have also produced TV-programmes concerning information media.

INSTRUCTION AT HELSINKI UNIVERSITY OF TECHNOLOGY LIBRARY - A CASE STUDY

Helsinki University of Technology Library is the national central library for technology in Finland. Its tasks, set out in the regulations of the library, include instruction in the use of information media and services to everybody in need of technical information. I shall limit myself to describing instruction given to the students.

A regular teaching programme was initiated by the library for all students of the University in 1970. From the beginning the instruction has comprised two levels:

1. an obligatory course in the use of the library for freshmen
2. elective subject-oriented courses in information retrieval for third and fourth year students.

Need for instruction

A definite need for organising instruction was felt both for students and the staff of the library. This was corroborated by two surveys. The first one was carried out in 1970 by my deputy, Kristina Erkko, (1) who interviewed visitors to the main library during one day. She found that the users considered the use of both the main catalogue and the classified subject catalogue difficult or unnecessary, and that secondary information media were unknown to the majority of students.

Three years later Elin Törnudd carried out a questionnaire survey directed to 500 students (2). This survey confirmed

the findings of Kristina Erkko and resulted in increasing the library's training efforts from six to sixteen courses per year.

Organisation of the obligatory courses for freshmen

Obligatory courses in the use of the University Library system, which consists of the main library, ten departmental libraries and a score of small institutional libraries are organised every year for the 850 first year students. The aim of these courses, as specified in the programme of the University, is the following:

"The students are enabled to utilise libraries and especially the services and catalogues of the library system of the University".

There are four parallel courses:

One for the Departments of Chemistry, Mining, Engineering and Forest Products.
One for the Departments of Surveying, Civil Engineering, and Architecture.
One for the Department of Mechanical Engineering, and
One for the Departments of Electrical Engineering, and Technical Physics.

The course starts with a double lecture which includes a video-tape presenting the use of the library. The lecturer, a senior librarian, further describes the holdings and different services of the library and distributes a guide on the use of the library (3).

The second part of this course is a tour of the main library and an exercise. For this purpose the students are divided into 24 groups of about 35 students who enter the library according to a fixed time table. Three senior librarians

and three information specialists conduct the tours, after which each student receives an assignment entailing the use of the catalogues, finding the publication and filling in a loan receipt or an inter-library loan request. The question can be:

1. Does Selected Rand Abstracts belong to the collection of the library system?

2. If so, in which library unit is it located?

3. Write a loan receipt for an overnight loan of the first issue of the current year.

The aim of the assignment is to simulate the lending situation. The conductor of the group checks the answers, as they are handed in by the students, and clarifies possible misunderstandings and erroneous answers on the spot. The signed answers are used to control participation.

These courses are organised in September. Because of scheduling difficulties it is impossible to achieve a 100 per cent attendance. Therefore the courses are repeated in December during the examination period. Those who have not attended the first course are asked to attend the December courses which are organised in the same way as the first ones.

Experiences from freshmen courses

During the seven years of instruction we have learnt from many mistakes. In the beginning all freshmen, 750 at the time, were seated in the"auditorium maximum". My boss lectured and found the audience too large to be captured. The present practice of lecturing to less than 250 students at a time is an improvement.

Recently the courses were combined with a larger entity called "studying techniques". Although logical, this experiment failed totally, because the entity was elective, and only about 20 per cent of the students participated. Since our library has an open access system, it is necessary for the reader to learn to know the location of its holdings. The staff of the Lending Department, who previously had to give individual guidance to the large number of new customers every year, has found that the questions of today are at a higher level than earlier and that there are less readers who need leading by the hand.

The enterprising spirit of the students has improved, and the use of the libraries has increased. In addition, it must be noted that students, to a much greater degree than earlier, use the reading rooms and group work facilities of the library. At times almost all of the 450 reading places of the main library are reserved. This means that every 11th student enrolled is in the library at the same time.

The teaching staff of the University has, on several occasions complimented us on the freshmen courses and satisfaction has also resulted in cash. The staff members of the library who organise and conduct the courses are remunerated like other lecturers who are not members of the permanent teaching staff. A new survey to find out, in quantitative terms, how strong an impact the instruction has had, will be carried out in the near future (2).

Subject-oriented instruction

The subject-oriented instruction consists of eight, annually organised, elective courses in the use of information media and services, tailor-made for students in their third and forth year. These elective courses concern information retrieval in:

- physics and mathematics

- mechanical engineering
- chemistry and chemical engineering
- civil engineering, surveying and architecture
- electrical and electronic engineering
- forest products (two courses every year)
- mining engineering, metallurgy and geology

The courses, taken before thesis work, aim at the following (I cite again the programme of the University):
"Students are able, during studies, and later in their career, to carry out literature searches, and retrieve data, to utilise libraries and their services and to use both manual and computer-based information services. Further the students are taught to write reports".

A course comprises twelve lectures held during a period of six weeks granting 1/2 credit point. The number of students per course has varied from 15 to 40. If more than 35 students register, the course is duplicated.

Four senior staff members of the Technical Information Department of the library carry the teaching load and are remunerated by the University. They are assisted by a teaching assistant working 16 hours a week.

Required reading for the courses covers a text-book (4), a third edition of which is under preparation, a guide on report writing and hand-outs.

The programme of a course in information retrieval in the forest products field is as follows:

- use of libraries
- information sources, general
- classification and indexing
- computer-based information systems, especially AIDS, ABIPC, Chemical Abstracts Condensed and Compendex.
- abstract and index journals concerning pulp,

paper and wood
- reference works related to pulp, paper and wood
- techniques of a manual literature search and recording its results
- on-line literature searching
- writing a report and the use of report literature
- the use of patents, statutes, standards etc.

Experiences from subject-oriented courses

Experience gained during the past seven years and from course evaluations have made it possible to improve the instruction.

It goes without saying that first class audio-visual aids improve the efficiency of instruction and keeps the attendance high. For this purpose 18 video-taped programmes have been recorded, slide/tape presentations have been acquired from the U.K. and the U.S.A. and the audio-part has been recorded in Finnish. Two tape/slide presentations have been made. The TV-tape presentations are listed in this brochure. Diagnostic tests have proved quantitatively the efficiency of good audio-visual aids.

Until three years ago the courses were organised as full term courses with one lecture a week. The attendance tended to fall at the end of the term. The present arrangement with two hours a week for six weeks, has kept the attendance high throughout the courses.

During the first years, passing the course required taking an examination. Since 1973 the requirement has been, either an examination, or performance of assignments. In connection with each lecture. The question can be:

"Who has in 1972 cited a paper by Moonigan, A. in Canadian Journal of Physics?"

This method has proved exceedingly fruitful when connecting the lecture directly with practice. Since the grade is directly dependent on the number of approved assignments the

students are motivated to do them all and to attend all the lectures. Continuous efforts are needed to improve instruction. At present 15 to 20 per cent of the students take an elective course. Our goal is 25 per cent. To sum up: instruction is necessary and it has a good cost/benefit ratio. It is easy to start, more strenuous to carry on, year after year, and to renew programmes to meet changing needs.

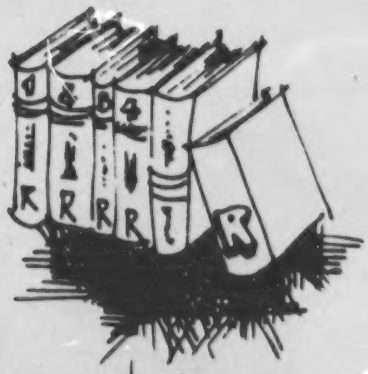
References

1. Erkko, Kristina, Teknillisen korkeakoulun kirjasston käyttöselvity: (Survey of the use of Helsinki University of Technology Library) Mimeographed 1970 15pp.

2. Törnudd, Elin, Selvitys opiskelijoiden suhtautumisesta Helsingin teknillisen koreakoulun kirjstoon. (Survey into student attitudes to the library) Helsinki University of Technolgy Library, Occasional Paper No. 10, 1973 24pp.

3. ABC för Teknisk högskolans bibliotek (ABC for the Library of the University of Technology) 7th ed. Espoo 1976 14 pp

4. Haarala, Arja-Ritta & al. Informatiikka. (Informatics) 2nd ed. Espoo 1976 156 pp.



PAPER I 4A November 2 1976

LIBRARY INSTRUCTION IN NORWAY - A SURVEY

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We have chosen to split these 20 minutes into three parts; the first part gives a survey of the library instruction given at our Universities. As the second part, Brita Lysne Kvam will give an outline of the instruction given at the Faculty of Social Sciences, University of Oslo. Finally, I will try to convey my own experiences in trying to build up a new library instruction programme for the Faculty of Humanities in Oslo.

Survey of the library instruction at our Universities

1. University of Tromsø

The University of Tromsø is the youngest university in Norway. It started in 1972, and to date the University Library has not been able to offer any form of user instruction. But this term they are starting up by offering information/instruction at three levels.

1. For new students they give one hour's instruction with a guided tour in the library. The instruction aims at making the students able to use the alphabetic and systematic catalogues. This program has been tried out on some groups of students, and has been well received.

2. For advanced students, the different institutes are offered a two hour course in literature searching in connection with the writing of term papers. This program has not yet been tried out.

3. For graduate students, the library offers a four hour course giving instruction on how to use bibliographies, followed by exercises. This program has not been tried either. In addition to these courses the library can offer tape/slide material from England within certain subjects and subject bibliographies.

2. University of Trondheim

The University is spread over the town in many different departments, and it is administered in two parts. The subjects covered are technology, science, natural sciences, medicine, social sciences, and the arts. Library user instruction has only been given in an organised form during the last few years, and varies according to subject.

Technology has been the forerunner here and regularly holds courses at all levels, starting with general introductory lectures for new students, and offers of 10 hour courses for more advanced students and others. Special courses are also given in particular aspects such as "Science Citation Index". Instruction is "live" and is given by university librarians and sometimes includes "cases". There are plans for using video-tapes, but the plans have not yet been realised due to lack of staff.

Science and the natural sciences have regular instruction at two levels, by librarians of the lending department at the elementary stage and by university librarians for the more advanced. For all these subjects the users are also given written guides to the library and bibliographical aids. For the arts and the social sciences, instruction is less regular - all new students receive an offer of elementary library instruction, but at later stages the courses vary both in regularity and content. Written guides to the library and a few bibliographical aids are available, and leaflets giving hints on general library use have also been printed for new students in social sciences. The need to use the library at the

elementary stages differs according to the varying kinds of set books, but many students are faced right from the start with the need to use the materials which are only available in the library - periodicals, statistical materials,etc. This makes the necessity for library instruction more and more obvious. It is very noticeable in all subjects that the average new user lacks basic library skills, for example in how to use the catalogues.

3. University of Bergen

At this university, the staff have designed an automated program for new students. It is a coloured tape/slide program lasting about 20 minutes, and it is an orientation to the library giving instruction in how to use the catalogues,etc.

A shorter version of this program is being planned, and there are also plans for making a similar program for the new library at the Faculty of Natural Sciences. The existing program has turned out to be successful, but there have been certain technical difficulties expecially when the apparatus is moved about.

For advanced students, instruction in bibliographies is given, on request, by the staff of the faculty libraries. The Medical Library formerly had a rather well planned and extensive course for advanced students and young researchers. This was part of the teaching program at the faculty of medicine. The course gave instruction in manuscript writing, literature search and documentation, and information about various computer-services. Unfortunately the course won little interest - it has been offered for some years without any success. The reason is probably that the students' time is very bound up with compulsory courses - possibly, too, the course was overdimensioned.

The College of Economics gives introductory lectures about the library as part of an introductory week for new students. Slides are used instead of a guided tour. For advanced students, they give individual instruction, based on fixed conference hours once a week. Bibliographies are worked out covering topics lectured on in the courses given for postgraduate students.

4. University of Oslo and colleges in the Oslo area

At the main University Library of Oslo, the staff arrange guided tours and give library instruction at various levels on request. But most of the library instruction is given at the faculty libraries on the University Campus at Blindern. The instruction at the Faculty of Arts and the Faculty of Social Sciences will be dealt with later on.

For medical and dental students, little or no instruction is given because their studies and their curricula are so fixed that there is little need for an individual search for supplementary literature. For postgraduates and young researchers, there are courses giving instruction in bibliographies, manuscript-writing, and orientation in computer-based literature searching - for instance Medline.

The course is compulsory for the dentists, optional for the medical researcher. Usually about 20 - 30 persons sign up for this course. They are divided into groups of 3-5 persons and the instruction is done mainly through assignments. The course is worked out by the staff of the University Library Bio-medical department, in co-operation with the staff of the Library of Ullevål Hospital.

The Veterinary College has a similar course for their researchers. But already during their ordinary studies,

the students of this college get 3 hours of library instruction, in small groups.

The Biological Library (also a branch of the University Library) has, till now, not had any organised form of instruction, but they are now planning more regular programs. There will be introductory information given through guided tours for new students. From 1977 on, subject specialists will give a 4 hour instruction as part of a general course for advanced students, organised by the faculty. These courses are worked out for homogeneous groups of students - for instance students working with plant-physiology. The groups will not be larger than 10 students. It is expected that this course will be extended so that it will cover most of the subject areas taught at the faculty.

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LIBRARY INSTRUCTION IN NORWAY - A SPECIFIC EXAMPLE FROM THE LIBRARY OF THE FACULTY OF THE SOCIAL SCIENCES, OSLO UNIVERSITY

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Our library is at the Faculty of Social Sciences of the University of Oslo and it is situated at the Blindern Campus. It is a joint library for the Institutes for Social Anthropology, Mass Communication Research, Sociology, Political Science, Economics, Educational Research and Psychology. The library is based upon an open shelf system in which most of the free literature is placed. It consists of 100,000 volumes, about 2000 periodicals, and a separate collection of reference books comprising about 6000 volumes.

Being subject to, and integrated with the University Library in Oslo, direct telephone extensions and cars for transfer of books provide the communication between the main library building down-town and the various libraries located at the faculties of the University. Every faculty Library is also favoured by the co-operation with visiting subject specialists coming from the main libraries: these specialists are covering individual fields and they are working part-time at the faculty libraries, participating in various activities at the annexes including that of user instruction.

The users of our faculty library are the graduate and post-graduate students of social sciences, and naturally, the teachers and research fellows of the university. Jointly the users consitute a complex user body expecting to obtain a variety of literature.

As regards user instruction the program has been scheduled at two levels:

First, instruction is offered to young students and those with quite limited experience in using a library.

Secondly, a separate course is offered to the advanced students who know the routine of the library already and who at their stage need reference material for a thesis.

Both types of courses are adapted to the specific field of the student:
A student of psychology therefore, will attend a different course from a student of economics.
Generally, however, the course will include a theoretical introduction and a guided tour in the library. The guided tours with the more practical instruction constitutes the main part, and emphasis is therefore placed upon keeping small groups of students, never more than 12 individuals. The intention of the elementary course is to familiarise the students with the practical arrangement of the library and to clarify simple principles of library techniques.

The more advanced course is scheduled to render information on how to do a literature search, how to apply the systematic catalogues and how to use the reference collection. The elementary introduction courses are arranged twice a year, and the advanced course is offered in February. In addition, many separate groups of students receive similar courses in between. Lately we have succeeded in incorporating our more advanced library course into the ordinary study program of some of the institutes of the faculty, particularly when methodical subjects have been lectured.

In addition to these courses, the part-time specialists from the main University Library are available for regular,

individual conferences in order to follow up the instruction for groups.

When discussing our experience after these years of library instruction some important factors may be pointed out:
Most of the graduate students know very little about the library before they attend one of the courses mentioned. Only a few are conscious of the value such information may be for their study. An investigation about these problems, which was published in Bok og Bibliotek (in Norwegian) in 1975, showed that only 10% of all graduate students are aware of the value of library training. Only 25% of the students attending our courses had visited our library in order to get books or some kind of literature. Of these students that had been studying at the faculty for more than 1 year, only 55% had been using the library. Less than 10% had been users at the main University Library as well as the faculty library. The findings showed significantly that the contact between the graduate student and the library is generally poor, and therefore should be improved.

Not every student is willing to attend the elementary course. When participating in the advanced course some participants do not have the basic knowledge which is necessary for a proper education at this level. Consequently much elementary information must be repeated, restricting the time scheduled for more advanced items. The advantage of incorporating our elementary instruction into the ordinary education rendered at various institutes must therefore be emphasised.

Next: it should also be mentioned that more educational knowledge might be beneficial to myself and I suppose to some other librarians working with user education. This statement does not imply that a librarian is always an insufficient teacher; the reality after some years has

significantly shown the opposite situation. Some are good teachers due to some inborn ability and in my opinion such personal qualities might improve even further by the knowledge of important principles of applied teaching. Over these years I have also been concerned in obtaining a balance between the application of technical tools in teaching and the valuable personal contact. The inter-dependance between printed and lectured information is also of interest. We share the general recognition that technical tools should not substitute for the teacher but applied in a supplemental way they are beneficial not only for the student, but also for the teacher.

I have realised how important it is to establish good communication with the users at an early stage and then to prove that the library can offer more than keeping a collection of books. It appears that when good communication is established with the library users, further cooperation is greatly facilitated. Our ability to offer small bibliographies on current subjects at the right time can make the students aware of the value of the use of literature and of the potential services that can be provided by our institution. As an example of this I can mention bibliographies of subjects discussed at current seminars like our late bibliography comprising the library's collection of literature on women. Another example is a small annual bibliography made for the students of economics dealing with the latest Nobel prize winner.

It is important, however, to have these facilities present at the right time, and timing is frequently more important than being completely perfect. Maybe we should remember the remarks by K.W. Deutsch who said that a bibliography is not a Bible.

Any introduction into a new and complicated field like ours is confusing for the new student. We include so many

details of bibliographical terms, abbreviations, modes of library application and various catalogues and reference systems into our presentations. Looking back on my own experience, or remembering the enthusiastic and devoted collegues presenting detailed information to the small and bewildered audience, one can only wonder that none of the students join Eliza in Pygmalion as she exclaimed, tired from learning: "Words, words, words ... give me love".

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LIBRARY INSTRUCTION IN NORWAY - EXPERIENCE OF LIBRARY INSTRUCTION AT THE FACULTY OF HUMANITIES OSLO

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I work as a university librarian at the library service of the Faculty of Humanities, a branch of the University Library of Oslo. I started in my job this last August, my main assignment expressly stated as being responsible for the users' instruction. Up till then, there had been no specially planned instructional program. But instruction had been given for some years at two levels, - for new students, general information about the library service and guided tours around the various libraries with instruction in how to use the catalogues, - for advanced students, instruction in literature searching and the use of bibliographies was given by the subject specialists from the main library in some subjects - not all.

To get a better understanding of the problems I faced when starting out to design a more set instructional program, it is necessary to give a more detailed description of the library service and the faculty where I work.

In the first place, we have no real lending library. There are two reading rooms for the undergraduate students, one seating 700 students studying various subjects, one especially for students of history, seating 80. These two reading rooms have libraries of approximately 43,000 volumes, but these are mainly for use in the reading rooms, they are to be lent only in special circumstances. The big reading room is our only joint library. But the library service also covers 32 different institutes with just as many libraries - covering all the subjects taught at the

Faculty, from general history, history of ideas, religion and art, to literature and all kinds of languages. All together these institute libraries have about 300,000 volumes placed around in the main building, and, due to lack of space, some institutes have moved out and are spread over a vast area. We have a centralised joint catalogue of these books, but,as some of the institutes are very reluctant to lend their books to others than their own students and teachers,we have to rely on the Main Library down-town as our lending library. We have all the same facilities as the other branches of the University Library - microfilmed catalogues, direct telephone extensions and car service.

With a conglomerate of libraries like we have here, it is difficult to design one general library instruction for the students, knowing that they use so many different libraries. Still, a large group of the undergraduate students do use the same library, that of the joint reading room. We therefore decided to work out an instructional program for the largest groups of these students - five groups in all: those studying English and American, French, History, Nordic and German. We planned to work out a general model for the instruction, only changing the examples to fit the various subjects.

Another problem was when to give this instruction. We could do something similar to what they had done at the Faculty of Social Sciences - give a lecture followed by a guided tour of the library at the beginning of the term. But we already had organised tours in connection with the orientation meetings arranged by the Faculty. Each institute has its own orientation meeting each term for new students and our staff managed a couple of years ago to be able to participate in these meetings along with the institute's own staff. The librarians give a short

information about the library and invite the students to join them afterwards to make a tour of the library. This has proved rather successful, approximately 40% of the students present at the orientation meeting have participated in this guided tour. They were divided into groups of 15-20 when necessary. We found we ought to keep these tours, where the students were shown their different sections of the library, were told about the catalogues, how to use them, various handbooks and bibliographies were pointed out, and lending possibilities were talked about. But although the tour was successful as a means of introducing the students to the library they were going to use, it was clear that a more thorough instruction was needed to enable them to make use of the resources of the library.

But how could we make sure they would come back for additional instruction. Well we can never make sure they will, but we could try to make this second instruction seem attractive, by integrating it with their curriculum.

We have decided to give this second instruction 4 weeks after start of term. About that time the students have started to write term papers, and will feel the need to know how to do a literature search, on a small scale.

In our program we start with an imaginary term paper assignment - the topic taken from their general curriculum. We start the search for literature by showing them how to use the subject catalogue. Then, choosing one card from our finds there, as an example, we interpret the information on the card; we then go on to point out the deficiencies of the subject catalogue (not registering periodical articles), continue our search through a literature lexicon, and end up with showing how to use a subject bibliography. During our search we also take time to inform about lending possibilities both from their own library and from the Main Library down-town, and we mean to cover all the information

the students need to gain elementary library skills. If this model proves successful, we plan to adapt it so that it can be used for the other subjects and libraries too. Then we discussed how to work out this program; we all agreed that it would have been desirable to give the students written assignments. We decided not to do so after all, considering the fact that students very seldom want to do something which they do not have to do. As long as library instruction is not entirely integrated with their own courses, I am afraid they will still regard it as not important enough to spend extra time on it. If they could get credit for a course in library instruction it would be different. Still we have to hope that the students gradually will realise that a better knowledge of the library is useful to them, and we must never stop thinking out new methods of making them realise this. For my own part, I hope this seminar will give me a lot of useful ideas for the work which I have just barely started on.

PAPER I 5 November 2 1976

EXPERIENCES OF LIBRARY INSTRUCTION - SWEDEN

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This is a report on experiences of library instruction in Sweden. The report is based on an enquiry mainly consisting of telephone interviews which I have had with people at different libraries. To some degree it will also reflect my personal opinion.

The history of user instruction in Sweden is neither very long nor very glorious. I would say that it begins in the middle sixties, and that the leading libraries in user education have been those serving specialised universities, like Chalmers University of Technology and the Agricultural University. The old, large university libraries have not been outstanding in this field, which is not surprising. User instruction is much easier to carry on at a specialised university with a limited number of students and a fairly uniform teaching curriculum, than at a large university with many different faculties and many different courses. Against this background I find it all the more admirable that the new Swedish multi-faculty university libraries - at Umeå, Linköping, Stockholm - have been as successful as they are in the field of library instruction. I would especially like to mention here the ambitious educational programme going on at Linköping University Library and the educational activities at the university branches at Örebro, Luleå and Växjö.

If we look at the general outline of Swedish user instruction, we find that in its most elaborate form it is generally given at three levels:

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a) every freshman is given an introduction to the library, is acquainted with the localities, the

routines and forms,

b) the sixth-eighth term students are given more thorough instruction in how to use the catalogues of the library and the different bibliographical tools, and,

c) the post-graduate students finally are taught how to use the bibliographical tools and different documentation facilities, not least in the field of computerised documentation, and in some cases how to arrange their own personal documentation and how to write a scientific paper.

Instruction on the first level - the freshman-introduction - is given at nearly every library, even at the old, large university libraries. But we all know that one cannot give so much credit to this first introduction. The students are not at that time very motivated to learn how to use the library, and we have to be satisfied if they become familiar enough with the library to go there later on when they really need it.

Much more important is the instruction at the second level for the sixth-eighth term students. At this stage students are supposed to write a short paper - a diploma thesis, or seminar notes - and are therefore clearly motivated for being taught how to use the library and its bibliographical resources. Education at this level is given at several of the specialised universities and at the new multi-faculty universities. This education is probably going to play an important role in the future: what the students learn here, will - hopefully - have an impact on their behaviour later when they are acting as information users in society, as scientists, and in industry, etc.

At some universities or colleges - e.g. The Karolinska Institute for Medical Education - emphasis is given to the third level of instruction, the one devoted to the post-graduate students. The libraries cannot in some cases provide instruction for the undergraduates, but can do so for post-graduates, depending on the facilities available. Furthermore, the new curriculum for post-graduate studies offers a good opportunity for library instruction. The new Swedish doctor's degree, a little more than five years old, is composed of different courses for one half of the degree, and of a thesis for the other half. The stipulated courses may well include a course of library use and documentation technique. This is the case at, for example, The Agricultural University, Chalmers University of Technology, The Karolinska Institute, and Linköping and Stockholm Universities. These courses are often fairly comprehensive. They may consist of up to 30-40 hours of lectures, exercises, and demonstrations and are sometimes concluded with an examination.

This leads us to the question of how library instruction is integrated into the ordinary curriculum of the university or the college. The post-graduate courses ordinarily give credit points for the doctor's degree but the second-level instruction usually does not. To my knowledge it is only at Chalmers University that it does, but at other places the courses are, if not compulsory, a part of the scheduled curriculum and have consequently - as in Linköping - a very strong position. I am personally of the opinion that this is a very important point. I think that library instruction needs the status which can only be given by timetabled and credit-giving instruction, and I think that the librarians have to make some kind of a common attack on the high level education administration to reach this goal. In the cases where there is a well developed educational system, library instruction is generally initiated by the library. In

some cases the intiative comes from the university's administrative bodies, e.g. at Linköping, The Karolinska Institute, and the Agricultural University. The highest degree of authorisation is the one given to the courses at Chalmers University Library, where they are compulsory, and also given credit points.

At libraries less developed in the field of library instruction, arbitrary courses are mostly initiated by the different university departments. We know that there are also courses in library [illegible]age arranged by the departments, sometimes given in the departmental libraries.

As to the content and the methods of library instruction, I think they are very much the same at the different levels all over Sweden, and, I dare say, very similar to what is used elsewhere in the developed world. Maybe one should notice that nowadays there is a general tendency to relate instruction to the students' own practical problems, and, I think that it is a very sound tendency. Students are more motivated by solutions of their own concrete problems than by abstract generalised lectures on library information. Motivation is here, as in any educational situation, a very important factor.

When it comes to the teaching material used in the instruction, the picture is also rather uniform. The basic material for the freshman introduction is almost everywhere, the guide to the library. For the instruction on the second and third level, different kinds of stenciled or offset-printed textbooks are used. To a certain degree one is relying on textbooks produced at other universities - the textbooks of Chalmers University are for example used at Linköping - but there is still an expressed demand for better cooperation in this field. A year ago there was a seminar here in Gothenburg, where it was suggested that Chalmers

University Library should act as a clearing house for educational material produced by different libraries in order to make it possible for participating libraries to use each other's material. Unfortunately, not very much has come out of this as yet. A current list of new material was promised at that seminar but none has appeared to date, due to the lack of material so far supplied. I will, however, take the opportunity to stress the importance of this cooperation scheme, and I am very pleased by the fact that we are going to discuss this topic later on in this seminar.

The larger part of the educational material is traditional, but audio-visual aids are used at some places, especially where many courses are given for a large number of students. Tape/slide productions - mainly of British-Sconul origin - are used at Chalmers and some other places, and video-tape productions have been tried at the Örebro University branch library. I know that I have expressed this view before, but I am still of the opinion that nothing competes with a teacher's enthusiasm for his subject, and that an A/V production, no matter how skilfully made, cannot replace practical exercises. However, I do think that A/V-aids may be useful in an individual learning situation, and I expect useful results of a project I am going to develop with the support of the Swedish Council of Scientific Information and Documentation, SINFDOK. The objective of the project is to provide a sound tape to be used in combination with a set of Chemical Abstracts, giving verbal instructions on how to use the different parts of this rather complicated information source.

The A/V-productions are mostly a help for an overloaded librarian, and that leads us to the work situation of the librarian who is in charge of the library instruction. The problem of how to put the user instruction into the library's organisational structure has many possible solutions. One is to put the head of the circulation

department in charge of it. Another is to make it the responsibility of the documentation unit. In some places the administration department is in charge of the instruction, and in other cases the library director himself has the main responsibility . Rarely do the libraries have special lecturers - as at Chalmers and Linköping. This lack of specialist staff for user instruction creates problems: it is difficult for the librarians to do the instruction work alongside their ordinary tasks.

What I have been talking about here is the usual library instruction, that is, instruction in the use of catalogues, bibliographical tools, and the ordinary documentation facilities provided by the library. There are, however, two important centres of data-based documentation in Sweden - the library of the Royal Institute of Technology, and the Medical Information Centre of The Karolinska Institute - which have their own very special profiles when it comes to library instruction. As they are operating a great many data bases, they also provide education in how to use them, how to compile profiles, how to use existing on-line systems, etc. Both of these institutes are giving courses which, even if they are mainly tailored for professional librarians and documentalists, are also suitable for the so-called end-users, amongst them post-graduate students.

Another scope of library instruction, on the borderline of the instruction dealt with in this context, is the one given to departmental staff members in charge of department libraries. Courses for that purpose are given at several places, and here for once the older universities seem to be leading.

I would like to add a few words here about activities apart from regular teaching, but still with the aim of

making students or other prospective library clients aware of the library and its possibilites. Scheduled instruction should be looked upon as the most important part of an information system directed toward the user. Other parts of this system are, for instance, signs, and posters, with the purpose of helping the library visitor to orientate himself in the library. This is very beautifully done at Chalmers Library. Introductory tours of the library at fixed hours may be another part of the information system. We have recently started fixed tours at our library, twice a week, that are open to anyone, but it is too early to report any results. A similar arrangement at the University of Gothenburg has not been very successful - very few people have taken advantage of the tours offered. Just in order to get people into the library, we, at the Agricultural University are cooperating with the public library in Uppsala, having them put a small collection of ordinary fiction books at our disposal.

I would like to conclude my paper with some odds and ends which I have found to be of interest. For instance, I would like to call your attention to the kind of library instruction that is going on at the Luleå University of Technology in the far North of Sweden. Like the instruction at some other young universities in the Scandinavian countries, the education there is given in a new way. It is based on problem or project orientated education. It goes without saying that the library instruction fits very beautifully into this educational scheme. When the students feel that they need information about how to use the library and its bibliographical resources - and they certainly do from time to time - they simply ask for instruction, and then the library is able to give this to a group of students highly motivated for library instruction. The National Library for Psychology and Education, as a national library, has special responsibilities. Its staff have

found their own way of solving their special problem in the field of library instruction. They do not primarily address themselves to the students but to the academic teachers. They gather them from time to time, for a week-long course with the hope that they will, in their turn pass on their acquired knowledge to the students, mainly post-graduate, whom they tutor.

One can conclude that library instruction is certainly going to be an expanding part of library work in the future. Different places are making their own plans for this, e.g. at Stockholm University Library a study project is going to be financed by the University's education unit. Its aim is to study the effect of library instruction given by the libraries, compared with that given by the academic teacher.

PAPER I 6 November 2 1976

LIBRARY INSTRUCTION IN THE UNITED KINGDOM

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The source for this short report is a survey I undertook for the British Library Research and Development during 1975 the aim of which was to compile a state-of-the-art report on user education in British universities and polytechnics. Evidence was obtained by interviewing librarians rather than by questionnaire. It is interesting to note the difference in information received by interviews compared with other surveys using questionnaires. This report will concentrate on fact and observation and I will reserve commenting on the facts until later.

The variation of approach from one institution to another, from one course to another makes generalisation almost impossible. One thing librarians are agreed upon is what the aim of user education is, namely, to enable the student to achieve maximum utilisation of library sources and services during his academic course. In other words the student will be enabled to effectively and efficiently use the library (the library being the building and its contents). A minority view suggests that the user must first be put in a favourable state of mind about libraries in general, and one in particular.

This leads on naturally to a consideration of orientation programmes. Orientation is concerned with introducing the user to the general techniques of library usage and services available in libraries, and, in particular, to the organisation services and layout of one particular library. This is an essential part of user education programmes in the UK because the use of libraries is seldom

taught in schools. There is one notable exception to this, however,in the courses organised by the Sheffield City Library for schoolchildren in the city.

Orientation programmes usually take place within the first few days of the student arriving at his university or polytechnic, though some institutions prefer to delay the introduction for a week or two. At many institutions the library orientation forms part of a timetabled programme for the new students while at others the library introduction is optional and not included in a timetable. A traditional pattern has emerged which combines some or all of the following:

talks by the librarian (often to large groups for between 5 and 45 minutes)
library tours or 'seminars on location'
tape/slide presentations
printed library guides, displays and exhibitions.

Film and video-tape are little used probably because of the expense involved. Where audio-visual aids are used it is usually a tape/slide programme because of the flexibility and cheapness of the medium. Tours of the library are no longer considered by many to be essential and are omitted from their programme. Indeed many librarians are dissatisfied with their attempts to introduce students to the library and are seeking alternatives. Many libraries now follow up the introduction in the first days with further advice and help at a later stage in the first year when the student has had practical experience of the use of the library and has been able to see what problems there are in using a large library. It is at this stage when the problems are known that practical guidance on the use of the catalogues etc.is more appreciated by the user.

Other institutions, particularly my own at Sussex, have sought a reappraisal of the role of the first contact between library and user. It is our view that any education at this stage should be directed more towards affective goals than cognitive ones. We are trying to create an atmosphere in our introduction programmes which conveys to the user the friendliness and helpfulness of the library staff and makes him aware of the role that the library can play in his education and of the role that he can play in the development of the library. To this end groups of students in the first three days of their stay at the university are welcomed into the library by a member of staff who then shows them a tape/slide presentation - "Using the University Library". This tape/slide programme does not follow the traditional pattern by showing slides of the library and talking about the use of catalogues etc. Rather it is a cartoon which has no set cognitive goals only affective ones. The script and slides are humorous and we believe that making the students at ease in this way helps create a frame of mind and a positive attitude towards the library. More formal instruction on the use of the library can be given later at a stage when the student appreciates the problems he faces. Though some of this instruction is done in groups most of it is on an individual basis at the time of need. A staff of six form a readers' advisory service which is always available to help students with their library problems - not to solve the problem but to show the student how he can solve it for himself.

Nearly all academic libraries in the UK progress further than orientation in that they provide courses of bibliographical instruction in some form or another. It is not possible however to produce an illuminative collective experience or approach. The variations from course to course and situation to situation are so great that it is a question of everyone seeking their own salvation. A few general points can however be made.

The majority of organised courses are for science subjects rather than arts or humanities and for undergraduate students rather than postgraduate. Courses vary from one to twenty hours in length and are normally given immediately prior to a project the students have to undertake (usually in the second or third year). The stucture of the course is such that they normally follow a logical progression for a literature search - the case-study approach is not widely used. Topics such as citation practice, use of personal indexes, report writing and the use of computerised information services are only included as and when appropriate, and little time is usually devoted to them. Practical work is increasingly being used and the assessment of that practical work is being taken more seriously. Library staff are consequently more and more involved with their academic colleagues in the design of projects and practical exercises.

Another trend is the move to small groups and seminar teaching, and libraries increasingly are providing their own facilities for courses in the way of seminar rooms and equipment. The most common visual aid though is chalk (plus blackboard). Overhead projector transparencies are also commonly used and most courses are supported by the distribution of hand-out material.

One interesting final point is to note the differences in the replies of polytechnic and university librarians to the question - what qualities and qualification are most important in choosing library staff to provide user education programmes? The answer of the polytechnic librarians was almost always - first a degree in a subject, then a professional qualification in librarianship and if possible a teaching qualification or experience. The university librarians on the other hand thought personal qualities were of more importance and among those mentioned were

enthusiasm, an ability to communicate, public relations ability, friendliness, patience, humility and maturity. Degree and professional qualifications were rated only equally or of a lesser importance.

In summary, nearly all institutions in the UK provide some form of user education programme. However, the experience of several years of providing such programmes has led to a genuine dissatisfaction with what has been achieved and to a search for a better and more meaningful approach. It is our hope that some of the experiments going on in Scandinavia will provide us with a fresh stimulus.

PAPER I 7 November 2 1976

LIBRARIANS AND USERS. PROBLEMS OF COMMUNICATION

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The title given to me for this paper is a very wide one in its scope since communication with users permeates the whole of library work from the junior assistant issuing books to the Librarian involved in university committees. The theme of the seminar is user education and user education is about communications. All contacts that the library has with the user should involve an element of education. The whole of this paper should be spent on this general theme but I wish to concentrate on more familiar aspects of communication in the area of user education in academic libraries, even though the public and special libraries present very interesting possibilities for user education.

This paper is a collection of personal thoughts brought together after several years spent in user education. After several years one tends to become disenchanted and therefore, some of the comments may seem possibly provocative and maybe negative. However, my hope is that the paper will start you thinking and discussing and allow you to re-examine your own attitudes and practices.

The problems I will highlight are taken from experience in the UK. Some of them may not be valid comments in a Scandinavian context though I hope you will be able to interpret the sense of what is said. When one reads about the problems associated with user education it is very often the case that those problems are written of as though they were out of the control of librarians - student motivation

timing of the course, size of group etc. My belief is that the answer to the problems of user education lies in the answer to this key question - why do we need to provide user education programmes? The answer to this question highlights the problems of librarian - user communication. For a moment let us consider one possible answer to the question, that is that we are librarians and they are users.

We waste too much time and effort explaining away problems of our own making, our professional mysteries; time and effort that could more valuably be spent making our libraries easier to use and understand. Or, as one librarian suggested to me during the survey I mentioned this morning, much library instruction is only rendered necessary by the complexity and inefficiency of the systems we employ and our first task should be to ensure that these are effective, straightforward and self-explanatory. We must get our buildings and our library right if we are to communicate effectively. Obviously if a building in the physical sense already exists there is not a lot that can be done to make it more workable as a library, but there are, within that building, steps that can be taken. For example, some librarians feel that the only reason they give orientation tours is to make up for the inadequate guiding or signposting they provide. Often, however, what guiding there is appears to be provided by librarians for librarians. Information, meaningful to the user, should be available at the point of need. As C.E.N. Childs, the Librarian of Brunel University puts it "If all the library staff were propped up dead at their posts..... it should still be possible for a student on his first visit to find his way to the books he needs." Yet in my survey of British academic libraries I found only one university, York, reporting the use of a professional help in designing a consistent guiding system.

Then again, consider one of the greatest barriers to library user communication - the mysterious catalogue. Have we not as librarians developed cataloguing as an art for its own sake? The great majority of users require a finding list and a subject index that uses a language and terminology that they understand. And while we are talking about terminology what about the discipline orientated terminology (jargon) that librarians are so fond of and which only perpetuate the mystique of the profession and creates a barrier between us and our users. This surely is one of the things that has gone towards creating a not very flattering image of librarians in the minds of the public. I can still never quite get over the look of astonishment on the faces of my friends when I told them I was going to be a librarian.

You, no doubt, have similar stories about the public conception and image of what a librarian is and does. It is not this image that ensures a low turn out of students for a "library lecture"; yet when the same course is given under the title of "research method" or "communications" it is well attended. We must educate our public about our profession or perhaps you believe the image is correct? If we cannot remove these fairly low level barriers to communication how are we going to cross the much larger ones that present themselves and in particular the attitude and priorities of librarians. Consider orientation programmes which were mentioned this morning. This is an ideal opportunity for creating a rapport between librarian and user. However, the continuing affection for the traditional methods led Ford to comment in 1973 that "the lecture given to freshmen students at the beginning of their first session must surely be a waste of time. The library with its vague connection with academic work can hold little attraction for a student struggling to adjust to university life. The tours which are often associated with such lectures similarly rely on the students" overtaxed memories for their impact. All too often the librarian

slips into jargon or relapses into an uninspired statement of rules and regulations'. Such comments though valid do not destroy the need for some programme for new students - a programme properly designed to enable the achievement of the objectives set for such an introduction. Too often we miss chances.

The objectives for such an introduction should surely be affective rather than cognitive, that is we should be more concerned with creating attitudes in the user and showing him those of the librarian rather than imparting information. In this respect the key resource is the librarian and much depends on his attitude and motivation. A question we all must answer is are we running a library, or providing a service.

If we now turn to courses of bibliographic instruction there are a number of factors which create barriers between librarian and user. Firstly, we seem to have very little idea as to what our aims and objectives are in providing instructional courses. Courses have been based on intuition which we justify by pious platitudes about user needs as we see them. Relevance is becoming more and more important to the student and his need (actual not perceived) should be foremost in our course planning. Instruction is valueless if there is no need for it. It may be that this lack of knowledge of user needs has sprung from the isolationism of librarians. Until recently it has always been considered the role of the librarian alone to provide bibliographic instruction. There is thankfully now more talk of a sharing between librarian and tutor

Closer co-operation with academic staff is seen by many to be the key to solving the problem of the motivation of students and also of providing a greater relevance to the courses. In this respect integration - a word not uncommon in educational circles - has taken on a new meaning.

Unfortunately, that meaning is different for different people. It certainly does not mean the insertion of traditional library and bibliography lectures into existing courses to give them some respectability though this in itself may have some value. It is also unlikely that the ultimate in integration, the library college concept, will be of practical application in this country. Somewhere between the two there may be a path worth pursuing. There is the danger associated with 'in' words and ideas that they are accepted uncritically and are seen as the panacea for all ills. It is necessary to ask seriously integration of what with what? If the answer is information handling with the learning of the subject then the teacher and the librarian are going to have to become involved in curriculum design. To a greater or lesser degree courses very often now include an element of bibliographical instruction integrated into departmental courses."[2]

There is a problem of acceptability of librarians by their academic teaching colleagues but this again can be reduced to the attitude of the librarian. Libraries with the greatest impact are generally those where the library and teaching staff meet formally and informally, i.e. whose librarians are <u>active</u> members of the institution.

In one way, however, librarians have to be isolationists, despite their wish to adopt common solutions or invoke cooperative efforts in user education programmes. There is no single approach to user education - each situation is different. Everyone must seek his own salvation. Co-operation is not reconcilable with a wish to make material used in courses and the courses themselves relevant to the local situation. Perhaps this desire to co-operate stems from a lack of confidence in our own abilities. A lot of problems could undoubtedly be eased if librarians were better prepared for what they are expected to do. In the widest sense the skills of communication should be introduced at library school. It is no use having a wide

knowledge of information sources if you cannot communicate that knowledge to the user. Librarians are not skilled educators. Many librarians are, for example, advocating more and more formal instruction at a time when their academic colleagues are providing less and less. The emphasis remains on teaching rather than guided learning. Experiments at the University of Sussex[3] designed to help change the pattern of library introductions have confirmed the old saying that students learn by doing, not by being told. As Line puts it " library information use is a practical skill, not something to be taught like history ". It is a skill one picks up and acquires facility in through continued practice.Very often our courses lack an effective practical outlook; they are not centred on the problems faced by the users and perhaps this can be discussed more fully when we look later at the SCONUL tape/slide scheme.

In conclusion, I would like to consider briefly a few general points. In particular I believe that in order to surmount the barriers between user and librarian we must reconsider our priorities. Too often I hear cries that there is not enough time to prepare courses and material. Why? Should this time not be made available or do our library managers not consider user education so important? There is a saying in the UK that if you are convinced of a need you should put your money where your mouth is. There seems also to be a lack of willingness to provide not only for formal user education but also for informal advisory services to support the educational programmes. We must reconsider the demands on our time. Is it really worth buying and cataloguing 20,000 books a year if no one is encouraged or shown how to use them? Would it not be better to buy 15,000 and ensure that they were effectively used? A balance needs to be struck between our priorities as collectors and as disseminators.

Of course it would be foolish to say that all the problems of communication between user and librarian are the fault of the librarian. Undoubtedly there are many of the user's own making, for example, the attitude of teaching staff and the teaching techniques they adopt. Although they agree in principle that students should learn to use the library and the literature of their subjects, staff do not put much emphasis on this by making it necessary for students to use the library to succeed in their course.

However, in this lecture I have tried to provoke you into re-examining your own attitudes and priorities. I suppose a text for the lecture could have been - Librarian, know thyself. I leave you with a wish of Robert Burns

> O wad some Pow'r the giftie gie us
> To see oursels as others see us!
> It wad frae mony a blunder free us,
> and foolish notion.

References

1. Ford, G. Progress in documentation: research in user behaviour in university libraries. J. Documentation 29 (1) 1973 85-104

2. Stevenson, M.B. Education in the use of information in university and academic environments. Aslib Proc. 28 (1) 1976 17-21

3. Reader Advisory Service, University of Sussex, Sixth form library visits. Library Association Record 77 (4) 1975 79-81

4. Line M.B. The case for information officers in Lubans, J. Educating the library user. Bowker, New York 1974

GROUP DISCUSSION I November 2 1976

AIMS AND OBJECTIVES FOR USER EDUCATION

Introduction

Erland Kolding Nielsen (Chairman)

As a starting point for the following discussion, I think that the programme of this morning was full of ideas and thoughts about the theory and practice of user instruction, good and bad examples of courses, varied experiences, all reflecting the many problems which are facing us. In this connection I want to make some preliminary remarks on aims and objectives. Two years ago, I wrote that the discipline in Denmark at least, was in a state of crisis due to the lack of theoretical approaches. From my point of view the main trends seem to be:

1. The problem of a technical versus a methodical approach, perhaps reflecting trends between practical and theoretical objectives.

2. The problem of the subject/problem versus library oriented approach reflecting the lack of coherence between library and teaching subject.

3. The problem of teaching library techniques versus subject tuition.

I refer to a single example. In the Danish report from 1970 on the "Instruction of students in practical (sic!) library usage and subject bibliography" the objectives were defined as "For any teaching.....as being to enable the students to use the library when he/she has the need to use it". This is a purely practical objective, and as such insufficient in my point of view: The aims must basically be:

1. To enable the student to recognise that he has a need for library service at all.

2. To give students a systematic knowledge of the bibliographic situation of their subject, of its aids and of methodical literature search.

3. To enable the student to connect the library to his subject needs.

A big problem - quite intimately connected with this question is the lack of didactics or curricula research, on a university level, as has, for example been stressed by Rolf Kluth. I therefore want to refer to an interesting German dissertation on these problems, as far as I know the only one in German, an abstract of which has been published in the journal Dokumentation, Fachbibliotek, Werkbücherie (Günter Bock: Hochschuldidaktische Aspekte des Bibliothekswesen", vol. 19, 1971, pp.33-40). It ends with a long range of theoretical,methodical and educational recommendations:

Recommendations for a modern integrated library instruction for students:
It is recommended
Preliminary conditions

1. That the development of a modern model of instruction should be preceded by a thorough analysis of the importance of library competence and/or qualified use for college and university students in future.

2. That the model to be developed for library instruction should start from a theoretical and comprehensive concept of the library and/or the use of the library.

Point of time

3. That the library instruction should not take place right after the beginning of the studies, but at different times during the course of studies of the

individual student.

4. That the library should be available for everybody at all times.

Psychological aspects of learning

5. That in developing a training model, the cognitions of the psychological theory of learning should be systematically applied. Thus it is recommended;

6. that the library instruction should ensure that the experiences of learning, to be conveyed in the course will be repeated.

7. that the instruction for students should imply an extensive practical use of the library.

8. that no isolated knowledge on separate arrangements and materials of the library should be given out of context and successively, but that library use - according to point 2 should be made explicit as a system of processes of thought and action, of methods and ways of library use and scientific aspects.

9. that the principles of a "strategy of search", arising in the course of every search of literature should be dealt with systematically and representatively.

10. that the experience of learning to be conveyed in the instruction course should be constructed as a kind of cumulative system, building on the experience, a system in which every new experience of learning implies a previous experience, and the level is systematically raised.

11. that library instruction should be integrated functionally into professional study, thus becoming an "integrated instruction for users".

Aspects of motivation

12. That library instruction should make use of as many factors as possible for promoting motivation, which will awaken, preserve and increase interest in the instruction for the use of libraries. Thus it is recommended;

13. that library instruction should be offered only if there is a potential need for it, arising from the first active academic endeavours of the students. Typical examples of such needs are:

the first paper or the first composition
intermediate examination
diploma, state examination
thesis, doctoral dissertation, etc.

14. that the advantages resulting from the promoting of motivation - which audio-visual media supply in from an additional visual stimulus - should be systematically used.

15. that the libraries should play an active part in the attempt to convince the academic staff of the scientific importance of library instruction for students and/or qualified library competence in order to make an indirect influence in this way on the motivation of the students as regards the library orientation and the use of the library.

Structure of the library instruction for students

16. That before starting with the development of a training model, the aims of the library instruction should be clearly and plainly defined according to the findings under points 1 and 2.

17. That the instruction for students should not consist

of just one course, but of a system of instructions, carried through at varying times, the aims, contents and times of which should fit in with the respective needs and/or the level of the studies of the individual student.

18. That the library instruction should be as informal and individual as possible so as to be available to every student at all times according to his needs and without any special encumbrances to the library.

Ref: Kluth, Rolf: "University library acitivities in modern higher education". 1975.

Questions for group discussion

The following questions were formulated for group discussion:

1. How could the groups define the aims and objectives of user instruction?

2. What should be the balance between theory and practice?

3. Should the approach be subject-orientated or library-orientated, or contain some sort of balance?

4. At what level should the instruction take place:
   At the beginning of university studies?
   At the undergraduate level?
   At the research level?
   At several levels?
   Should the instruction be integrated in subject-teaching?

5. What should we do in order to motivate the students (and the university teachers)?

Discussion

1. The discussion brought out, amongst other things, the difference between cognitive goals - concerned with understanding - and affective goals - concerned with feelings. The need for library orientation (concerned with enabling the student to become aware of the existence of the university library and the services available there) was pointed out by all groups. Specific objectives for this orientation were not defined, but the discussions showed that these would be of both cognitive and affective type. With regard to further instruction in the use of the library, the need for integration with the subject-orientated academic studies was stressed. This should obviously influence the formulation of goals and specific objectives for library instruction.

2. The need for both theory and practice in user education was pointed out, and the importance of "learning by doing" - practical experience in user education - was stressed.

3. All four groups emphasised the need for subject orientation in library user education. "The need to use the library should be generated by the (subject) course work".

4. With regard to the levels (or timing) of the library instruction three levels were suggested:

   1. Basic orientation.
   2. Introduction to information retrieval (to be given at a point when students needed to learn how to obtain information in connection with their other university studies)
   3. An advanced course (for research students)

   The importance of contact and cooperation between the library staff and the academic staff was pointed out, in order to plan for the best time for the instruction. "The teachers know at what levels library instruction is needed". Timing

is dependent on the structure of the academic courses.

5. The importance of motivation for the individual student was stressed, and this was considered to be closely dependent on a link up between library education and his/her academic studies,- subject/project orientated courses. An important question was that of the motivation of academic staff. It was stated by one group that "younger teachers were felt to be enthusiastic about library education, but that older teachers were more often set in their ways, and not so willing to introduce library useage into their courses". Suggested methods for increasing motivation were:

   1. Increased informal contact between library and academic staff.

   2. By "word of mouth" general spread of information as a result of successful courses.

   3. Active promotion of information on courses of library education - to the academic staff.

   4. By increasing student awareness of the library - since the student of today is the teacher of tomorrow.

   It was also pointed out that library user education should be an important part of Library School Training. Further, the need for the integration of user education in academic libraries with user education in public and school libraries was also stressed.

PAPER II 1 November 3 1976

TEACHING METHODS AND MEDIA - AN INTRODUCTION

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I. In planning education programmes for library users, it is necessary to define the main goals and specific objectives for the courses to be given, the course content and timing of the various stages, and the teaching methods and media to be used. The result of this planning is then tested in a practical situation, and evaluation is carried out in order to assess the effectiveness of the programme. The development of a course of education is represented diagramatically in Fig. 1. This paper will provide a general introduction to the use of different teaching methods and media in programmes of library user education.

II. Teaching methods and media for library education

Teaching methods may be roughly divided into those which are suitable for group instruction, those suitable for individual instruction, and those suitable for both. See Fig. 2.

Traditional library instruction has made considerable use of the lecture method for large groups, the guided tour for smaller groups, and individual help to the students who ask for this at the information desk. During recent years there has been an increased use of audio-visual media such as tape/slides, films and video-tape, and to a certain extent computer-aided instruction.

III. Factors affecting the learning process 71

Education can be described as a process which changes the learners. This process can be affected by a wide variety of factors. However, as has been pointed out by Hills in

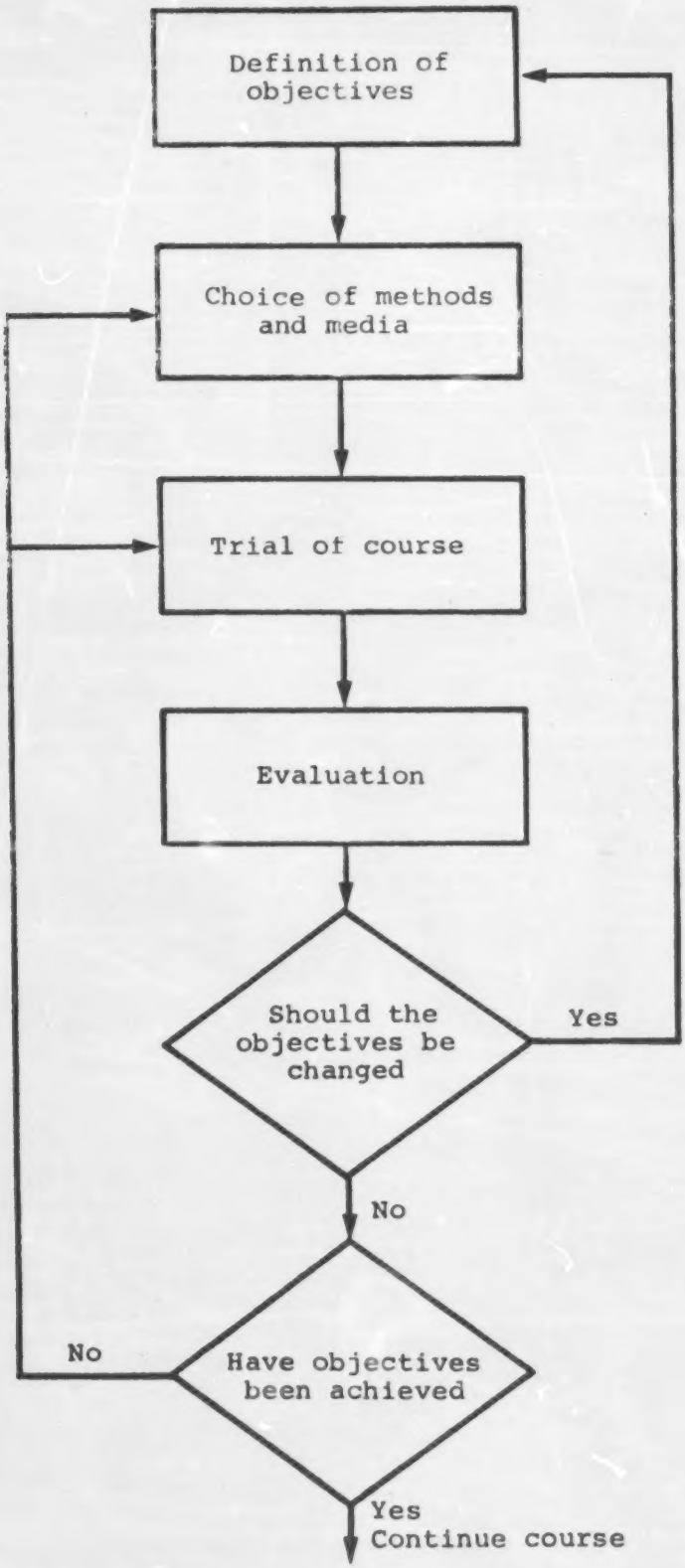


Fig.1. Development of a course of education.

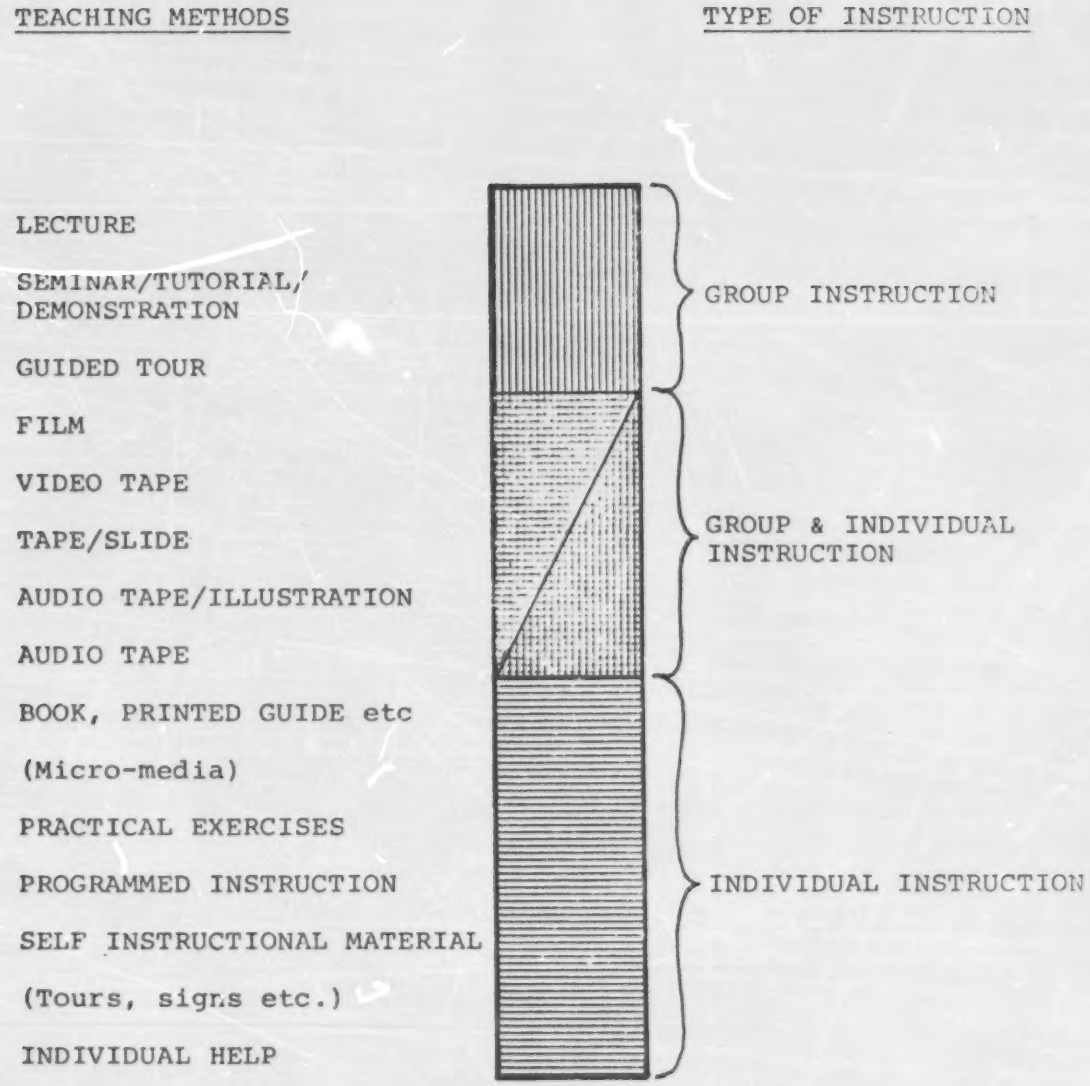


Fig. 2. Teaching methods for group and individual instruction.

1974, there are four main factors that affect learning in practical situations (Ref.1.):

1. Motivation
2. Activity
3. Understanding
4. Feedback

These factors can be considered in relation to the programme of library education:

A) Motivation. Instruction should be given at a point of high motivation, as for example when the student wants to obtain information in connection with a particular project.

B) Activity. Active work on a problem - learning by doing - is likely to be more effective than simply being told how to do a particular piece of work.

C) Understanding. Library education will be more effective if the student understands what he is doing and why he is doing it - that is, if new facts can be related to existing knowledge.

D) Feedback. Feedback, information on the progress being made should be available to the student.

In addition, factors affecting the neurophysiological sensory input can be considered. Teaching methods may, for example, use visual or auditory stimulation, or a combination of both. Methods which make use of a combination of sensory inputs are likely to be more effective than those which rely on a single channel of communication. (Ref.2). The possibility for the student to control the rate of flow of information, in a given learning situation, is another factor which affects the learning process.

Interaction between individuals concerned in the teaching/learning situation also affects the learning process. This interaction can be roughly divided into "teacher-student" and "student-student" interaction. Thus, for example as Revill has pointed out, in 1970, in programmed instruction, students work as isolated individuals; there is little or

no interaction with other students, or with the teacher. This might be an advantage for some students, but these factors "may not favour the extrovert student who prefers the companionship and competition of the classroom. Research does indicate that introverts learn more easily from P.L. than extroverts" (Ref.3.)

In Table I an attempt is made to consider various teaching methods for library education, with respect to the factors affecting the learning process, the number of sensory inputs utilized, and student-teacher, student-student interaction.

In Table I the following symbols are used:

+ = presence (of a factor etc.)
- = absence
M = the need for a student to be sufficiently motivated (Motivation)
A = the need for a student to be actively involved (Active work)
U = the need to relate new work to existing knowledge (Understanding)
F = the need for a student to evaluate continuously his progress (Feedback)
Au = auditory sensory input
V = visual sensory input
R = possibility for learner to control the rate of flow of information
T-S= Teacher - student interaction
S-S= Student - student interaction

From Table I it can be seen that no one method is suitable for all learning/teaching situations or for all individuals. The various methods and media should be used to supplement each other in any given programme of education. Enright has pointed out, with regard to media, that "Too much attention has been given to the possibilities of the new

TEACHING METHOD	FACTORS AFFECTING LEARNING				SENSORY INPUT			INTERACTION	
	M	A	U	F	Au	V	R	T-S	S-S
Lecture	±	±	±	-	+	+	-	+	-
Seminar/ demonstration	±	±	±	+	+	+	+	+	±
Guided tour	∓	-	∓	-	+	+	-	+	-
Film/video, tape/slide for group instruction	±	-	±	-	+	+	-	-	-
Tape/slide for individual instr.	+	+	±	-	+	+	+	-	-
Book/printed media	+	+	±	-	-	+	+	-	-
Practical exercises	+	+	±	+	+	+	+	+	+
Programmed instruction	+	+	±	+	+	+	+	-	-
Self-instruction	+	+	-	+	-	+	+	-	-
Individual help	+	±	-	+	+	+	±	+	-

Table I. Learning methods - a summary of factors affecting learning, sensory inputs and student-teacher interaction.

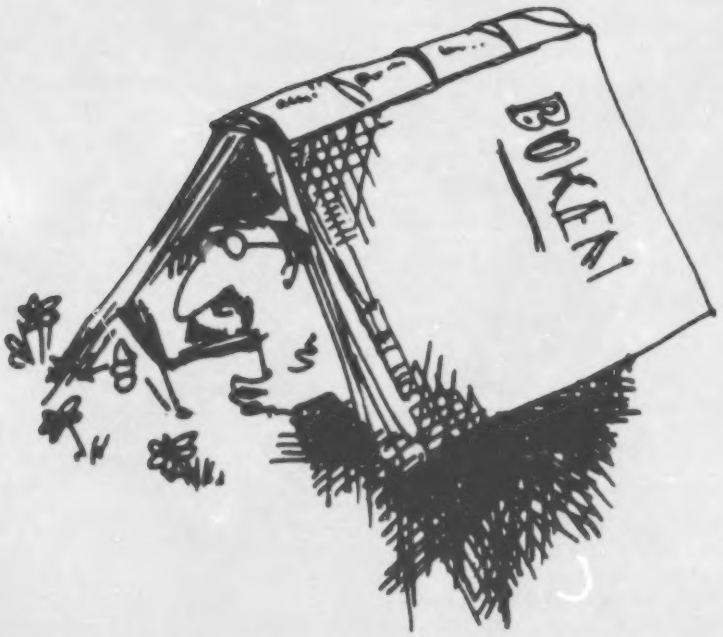
media supplanting the book, and far too little to the ways in which each can and does supplement the other", (Ref.4.). The use of new media and methods may well stimulate increased use of other media and methods. Thus teaching by various means in a programme of library education may well lead to the increased use of media - both learning media such as books, tape/slide guides, and media for information retrieval such as abstracts and indexes. With regard to library education, it can be seen, from Table 1, that certain methods appear to be more suitable than others for this type of instruction. Such methods are small group methods - seminars and demonstrations - practical exercises and programmed instruction. Other methods which should prove useful are lectures, the use of printed media, self-instruction methods, individual tape/slide instruction and individual help. It appears that the guided tour, and various audio-visual methods such as films and video-tapes would be less suitable. A detailed consideration of various teaching methods and their suitability for library education has been given by Fjällbrant (Ref.5.).

IV. Conclusions

After formulation of goals and objectives and choice of methods and media for the course, it is necessary to test the proposed instruction in practice. Choice of teaching methods and media depends on the learning/teaching situation, the subject material, the students and the teachers. No single method could be suitable for all occasions, and there are many reports of the use of different methods in library user education. Whatever the methods chosen for the education of the library user, it is necessary to carry out careful evaluation, in order to study the effects of the instruction.

References

1. Hills, P.J. "Library instruction and the development of the individual" Journal of Librarianship Vol.6(1974)4 p.255.
2. Rigg, R.P. Audio-visual aids and techniques. London, Hamish Hamilton, 1969.
3. Revill, D.H. "Teaching methods in the library: a survey from the educational point of view" Library World Vol.71 (1970)
4. Enright, B.J. New media and the library in education. London, Bingley, 1972.
5. Fjällbrant, N. "Teaching methods for the education of the library user" Libri. Vol. 26 (1976)4 p. 252.



PAPER II 2 November 3 1976

TAPE/SLIDE - THE SCONUL SCHEME

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During 1970 discussions were initiated between university librarians in Britain on the possibilities in the production of tape/slide guides to the literature of particular subjects, to abstracts and indexes and to certain major reference works, e.g. Beilstein. This resulted in the establishment of a working party under the auspices of SCONUL and a Steering Committee was set up.

The scheme evolved by the Steering Committee was that each presentation should be the concern of two or three libraries. During 1971 the work was shared out among 23 libraries (21 university or university college plus the National Lending Library and the National Reference Library of Science and Invention). To show the scope of the activities during 1971 a list of the presentations that were in preparation at that time is shown below.

TITLES IN PREPARATION 1971

Title	Producer	Working Party Members
Introduction to information retrieval	Loughborough	Nottingham Reading
Guide to abstracting and indexing services	Surrey	NRL&I Salford
Guide to report literature	NLL	Durham Sheffield
Guide to British official publications	Warwick	Durham LSE

How to search British patents	NRLSI	City
Guide to the literature of chemistry	Royal Holloway College	NRLSI
Guide to the literature of electrical engineering	Bradford	Aston Loughborough
Guide to the literature of medicine (including MEDLARS)	Newcastle-on-Tyne	Birmingham Sheffield NLL
Guide to the literature of mechanical engineering	Aston	City Bradford
Introduction to the literature of sociology	Bath	
Guide to the London Bibliography of the Social Sciences	York	
Guide to the use of Beilstein	Salford	
Guide to the use of Chemical abstracts	Southampton	Chelsea College Surrey

Tape/slide presentations have been shown to have advantages over other forms of presentation, i.e. cine film or video recording, in that they are of relatively low cost, flexible, can be updated relatively easily, are easy to operate and are robust in terms of normal handling.

In the context of user education tape/slide guides were thought to be of use in two ways:

1. For group work where the guide is used perhaps at the beginning of a session to set the framework for the topic; this could then be further discussed by the students and the tutor who could also introduce additional points and clarifications.
2. For individual use where the students require specific information e.g. on how to use the chemical abstracts. Here the tape/slide guide would be borrowed, taken to a carrel containing the necessary equipment and used.

These first presentations showed the importance of technical facilities in the production of the tapes and the slides. Where there had been good co-operation between a library and an audio-

visual aid unit, this was reflected in the quality of the final product.

The Tape/Slide Method

At the beginning of my own work in this field and at the beginning of the SCONUL tape/slide scheme,published information on the use of tape/slide materials came mainly from medical sources, for example at the University of Glasgow Department of Medicine,Gardiner Institute. (Harden, Lever Dunn, Lindsay, Holroys and Wilson 1969). The use of audio-tape for medical instruction was largely pioneered in this country by Doctors J.and V.Graves, who run the Medical Recording Service Foundation which is a non-profit making activity of the Royal College of General Practitioners and provides teaching material in the form of audio-tapes and tape/slide materials on long or short term loan. A report of a medical audio-tape conference held in 1970 indicated that even at that time the scope and use of tape and slide materials in medical education were considerable. (Graves and Graves,1970).

At the first meeting of the SCONUL Group in July 1970 I agreed "to produce a brief practical aid which could be demonstrated and passed on to everyone". This was produced in August 1970 with the aid of colleagues and members of audio-visual units in other universities and was made available to all interested parties (Hills, 1970). A version of it was later incorporated in "Tape/Slide Presentations: Recommended Procedures" (Earnshaw, 1973).

This simple practical guide was produced to get librarians started, especially if they were unable to benefit from the advice of an audio-visual unit. The following account from one of the first producers of tape/slide material in the SCONUL scheme is typical of the way in which this worked out in practice.

"We had at first no idea how to do a tape/slide, so we sat down and wrote out what we thought was a script, which described what we thought we ought to be talking about.A colleague had quite a reasonable speaking voice so we decided to use his voice in the recording. I took most of the visuals based on the script that we worked out. We then had a package of slides and we had a recorded tape and so far it looked reasonable. Then we put the two of them together and the result was an utter disaster, because while the slides were O.K. in themselves and the tape was O.K. within itself. the merging of the two just did not come off. There were two main problems. Firstly we had some areas which had a lot of slides illustrating them. There were other areas where one slide remained on the screen for vast amounts of time, or so it seemed to us. Then there were other things - two or three things in the same slide, some of which were quite obvious, and others only noticeable when your attention was called to them - that the little white square in the distant corner is what is being talked about - that sort of thing. In addition we had one more complication - some of the pictures looked alright as they were but very often we found that when we projected them they did not really make the point we were trying to make. We would have to take a different angle or closer view or in some cases a more distant view.

The tape presented the sort of problem where you found you were going into fantastic detail on certain minor points and there were large chunks that we should have been talking about but did not even come up for mention. This we were unaware of, but when we showed it to a few selected guinea pigs these were some of the things they seized upon straight away. What eventually emerged as a public version was the Mark 6. It took a long time before we got to that point because we were learning literally on the job. Also it was not a full time function, and we had to fit this in a full workload. This is the sort of thing one learns

by actually doing it. It is impossible to quantify every single item because very often you only notice it once you have developed a certain experience".

The Use of Tape/Slide Materials.

In the SCONUL scheme there are now 16 tape/slide guides available and a further 11 are in active preparation, a number of these now being at the final stages. (Details of completed presentations are given in the Appendix). Another round has just been launched consisting of another possible 10 tape/slide guides. In addition many libraries have their own locally produced tape/slide material on an introduction to their own libraries and the the publications that they hold.

This wide use of tape/slide materials tempts one to ask what is the reason for this popularity. There is certainly no definitive research that says that the tape/slide method is better than other audio-visual methods, video-tape, cine films, etc. Research is going on which may produce guiding principles for media research,for example, that reported by Hawkridge at the Open University (Hawridge, 1971) - this reference contains a summary of work in this area but at the moment the principles are little more than a rule of thumb.

Campeau's conclusion perhaps summarises the present "state of the art" when she says "All indications are that decisions as to audio-visual devices to purchase, install and use have been based on administrative and organisational requirements and a consideration of cost, availability and user preference, not on evidence of instructional effectiveness - and no wonder. To date media research in post school education has not provided decision makers with practical, valid dependable guidelines for making these choices on the basis of instructional effectiveness". (Campeau, 1974).

The most obvious difference between the use of tape/slide material and video-tape or cine film is that of having a still picture and a moving image but unless a skill involves movement the use of still pictures would seem sufficient.

In the absence of principles for using tape/slide material concerned with its effectiveness for learning one then looks, as we have said, at it in terms of cost, ease of preparation and use, flexibility and other largely adminstrative features. That tape/slide materials are relatively easy to make and use, that they are flexible in that they can be revised and updated are factors that are undeniable. They are also of relatively low cost and the equipment for their use is reasonably well standardised thus allowing for interchange of materials between institutions. These factors could well account for the popularity of the SCONUL tape/slide presentations and in some cases up to 100 copies of a presentation have been sold in Britain and other countries.

Evaluation of the SCONUL Tape/Slide Guides

Since 1973 I have been directing a project funded by the Research and Development Department of the British Library which has investigated procedures for the preparation and evaluation of tape/slide guides for use in information and library instruction. Work has been in the areas of:

1. the preparation of bibliographies on library instruction, audio-visual methods and student learning;
2. report on a pilot evaluation to identify problem areas for formative evaluation of tape/slide presentations;
3. evaluations of tape/slide material in relation to the SCONUL scheme for the production of tape/slide guides to library instruction;
4. an investigation of worthwhile aims and objectives in courses of library instruction;

5. a survey of printed guides;
6. the preparation of an evaluation package for use with tape/slide material.

The final report of the project is now almost complete and it should be available early in 1977.

Typically librarians talked to are using the SCONUL tape/slide material in three main ways:

1. as material for their junior staff to increase their own knowledge in specific subject areas;
2. held in the library for use by individual students as and when needed. Student's attention has been drawn to the availability of the tape/slide by a notice placed at the location of the material;
3. used to show the scope and use of library materials to groups of students, a kind of initial familiarisation which is later followed up with discussion, handout material and practical exercises.

It is easy to be critical of some existing SCONUL tape/slide material especially since in the first round of productions librarians were only just beginning to get used to the method and did not always have access to good audio-visual facilities. However, even with this qualification I think we should bear in mind that because of the SCONUL tape/slide scheme a large number of librarians have now been able to see what someone else feels is appropriate in a particular subject area. In this sense SCONUL tape/slide producers have done what very few academic members of staff have done to date, that is, exposed their teaching methods to public view.

Another point is that no-one teaches in exactly the same way as any other and consequently in any educational field it is very difficult to generate material that can be used by teachers in different institutions. The SCONUL tape/slide material does, however, offer an opportunity to a librarian to see what someone

else does and to alter or expand it to suit his own circumstances or methods of working for, as we have already observed the tape/slide method is flexible and easily revised.

Future Possibilities

The development of the SCONUL tape/slide scheme falls exactly into the pattern suggested in the quotation given previously, since the tape/slide material which has been produced gives largely straightforward instruction in the use of library materials, and has been based largely on organisational and administrative considerations.

There is no denying that by being based on such considerations the scheme has been successful both as a co-operative venture and in making this material available to a large number of libraries and potential users but what should be more in question is whether the material produced helps the library user to acquire the skills he requires. It is here that we need to consider not just the relative merits of tape/slide, tape/book or video, but the total setting of user instruction. This in itself is no revolutionary statement since many of the librarians and producers that I have spoken to during the course of the SCONUL scheme have seen tape/slide material as a basic information-giving device to be used in conjunction with seminars, discussion and practical work.

The exchange of experience seminar held on 2nd March 1976 at City University, London, expressed these feelings in terms of the need for the development of "teaching packages" which although they might contain information-giving material in the form of tape/slide sequences would also involve other methods and media. In a way the term "package" is a limiting one since it seems to imply that a "package" could be developed which contained everything and could be handed over to the library issue desk. It may be that the human interaction between tutor and student, but in a structured setting, is still the

most important ingredient of this "package".

Future possibilities are therefore considerable but must not be thought of merely as the choice of video tape as against tape/slide. Rather they should be thought of in terms of the task and the use of the most appropriate methods by which to carry out that task.

What practical help and advice is available ?

This was a question that we are often asked in the context of the preparation of tape/slide materials. Our answer is usually a two part one; firstly you should seek the help and advice of your audio-visual unit and if this is not available then you should obtain a copy of "Tape/Slide Presentations: Recommended Procedures", edited by F. Earnshaw and published by SCONUL (Earnshaw, 1973). This booklet, which has already been mentioned, contains a simple account of the preparation of both audio-tapes and slides and their synchronisation, prepared by members of the project team with help from the audio-visual units of a number of universities.

In order to further help to answer the question what help and advice is available apart from one's own audio-visual unit, the final report of the Surrey Tape/Slide Evaluation Project contains two other things, which we hope will be of use.

1. A select bibliography of references in this area. The bibliography was prepared by writing to audio-visual units in institutions of higher education asking them if they could help us by letting us have copies of any booklets, etc. that they produced to help their academic staff in the three areas below, or details of any notes, reprints of articles that they found especially useful for them.

   The three areas were:

   a) Techniques of good audio and visual presentation;
   b) The selection and appropriate use of all audio-visual methods;

c) The preparation of tape/slide or tape/paper material.

2. To give more help in the area of good visuals for slides we have included the pictures and script of a tape/slide "Diagramatic and Textural Slides", which was prepared by the University of Surrey Audio-Visual Aids Unit and the Institute for Educational Technology.

References and Further Reading

Brewer, J.G. and Hills, P.J. 1976 Evaluation of Reader Instruction, Libri, 26.1. 55-65.

Campeau P.L. 1974. Selective Review of the Results of Research on the Use of Audio-Visual Media to Teach Adults. AVCR, Indiana University, Bloomington, IN 47401. AVCR Vol. 22 Spring 1974.

Earnshaw, F. Co-operative Production of Tape/Slide Guides to Library Services. Library Association Record, Vol.73 No. 10. 192-193.

Earnshaw, F. (Ed.) 1973 Tape/Slide Presentations: Recommended Procedures. SCONUL, London

Fjällbrant, N. "The use of audio-visual material in library instruction" In: Ikke-boklig materiale i bibliotekene. Foredrag ved NVBF's medlemsmøte i Trondhiem 24-26 juni 1974. (Proceedings of the 4th Meeting of the Scandinavian Research Librarians Association, 24-26 June 1974), Trondheim 1975. pp 63-74.

Fjällbrant, N. The use of tape/slide guides in library instruction. Tidskrift för Dokumentation. Vol. 29 (1973) 5, p 116-125

Fjällbrant, N. Teaching methods for the education of the library user (Libri Vol 26 (1976) 4 p 252.

Graves, J and Graves, V (eds) 1970. Third Conference on the use of Audio-Tape in Medical Teaching. Oct. 1970. Medical Recording Service Foundation.

Harden, R.M.G, Lever, R., Donn, W.R., Lindsay, A., Holroyd,C., and Wilson, G.M. 1969. An Experiment Involving Substitution of Tape/Slide Programmes for Lectures. The Lancet. 3.5.69. 933-935.

Hawkridge, D.G. 1973. Media Taxonomies and Media Selection. In Aspects of Educational Techology VII (Budgett, R and Leedham, J. Eds). Pitman Publishing, London.

Hills, P.J. 1970. The Preparation and Use of Tape/Slide Presentation in Library Instruction. Now in Earnshaw, F. (ed) 1973 Tape/Slide Presentations: Recommended Procedures SCONUL, London.

Hills, P.J. 1972. The Production of Tape/Slide Guides to Library Services. Visual Education June 1972

Hills, P.J. 1974. Library instruction and the development of the individual. Journal of Librarianship. 6(4) Oct 1974 255 - 263.

Hills, P.J. Library instruction and the development of the individual. Journal of Librarianship. 7(4) Oct 1975

Hills, P.J. 1976. Self-teaching and the development of the individual Aslib Proceedings, 28(9) Sept 1976 314-321.

Hills, P.J. 1976. The Self-Teaching Process in Higher Education. Croom-Helm. Ltd., London.

APPENDIX

SCONUL GROUP FOR TAPE/SLIDE GUIDES TO LIBRARY SERVICES

Completed Presentations 1976

The following have now been completed and may be purchased direct from the producer. Copies have also been deposited at the British Library, Lending Division, and these may be borrowed on short loan for evaluation purposes before deciding to purchase. Some producers may be prepared to send copies on approval. Prices are correct as of January 1976 but may be subject to revision without notice.

Introduction to Information Retrieval (Science and technology version)
Uses a small search as a case study, of possible interest to almost any kind of audience but particulary life sciences or design engineering students. Seven basic steps of any information search are indicated and exemplified. This production aims to stimulate interest in the subject, but although designed to be shown as a first introduction, it could be used generally as well. The basic steps are listed in the notes, which otherwise do not summarise but present complementary information to the commentary.
3rd edition, 1974 by R.A. Wall and others. Tape pulsed as per USPEC 2. 41 slides, 20 minutes, price £12. (The Library, Loughborough University of Technology, Loughborough, Leics. LEII 3TU).
N.B. A conversion kit may be ordered to modify the 1st and 2nd editions.

Guide to Searching British Patent Literature
Describes first how to identify the British patents granted to a known inventor or company in whose name they are registered. Then it shows how to find UK patents granted on a particular subject. This is essentially a beginner's guide and is geared to facilties available at the Science Reference Library. It is, however, suitable for general use as apart from references to some indexes and registers available only at the Science Reference Library, the methods described are applicable to searching other collections of UK patents.
51 slides, approx. 18 minutes, price £14. (Science Reference Library, 25 Southampton Buildings, Chancery Lane, London WC2A 1AW)

A Basic Guide to the Use of Beilstein
An elementary introduction to Beilstein's "Handbuch der organischen Chemie", showing how to carry out an information search accompanied by duplicated notes on nomenclature. For undergraduate and research students.
50 slides, 20 minutes, price £10. (The Library, University of Salford, Salford M5 4WT).

Economic Statistics
The tape/slide aims, by means of a case study enquiry based on the motor industry, to introduce the audience to some of the major types of statistical publications available in this country. It also gives some advice on points to watch when using statistical publications - units employed, geographical area covered etc. It is not intended that the audience should remember in detail the titles of the source quoted, but rather that they would appreciate some of the important kinds of publications available. The presentation is aimed mainly at undergraduates, though it could be suitable for anyone who has no knowledge of statistical publications, including library staff.
47 slides, 11 minutes, Price on application (E.B. Kirtley, Asst. Librarian, University Library, University of Lancaster, Lancaster LAI 4YH.

Searching the Literature of Science Education
Target population: students of science education unfamiliar with bibliographical techniques for searching the literature Part I shows the finding of a relevant book on the library shelves and the examination of its list of references. It continues with an examination of the possible weaknesses of lists of references and in the interval between parts 1 and 2 there is an exercise involving a critical look at one such list. Parts 2 and 3 show some of the main British and American bibliographical sources of books, journals, articles, reports, curriculum project material and theses.
58 slides, 30 minutes £15. (The Librarian, Chelsea College of Science & Education Technology, Manresa Road, London S.W.3)

Population Census of Great Britain
This tape/slide covers the historical development of the Census, the 1971 Census, and identifying and using Census papers in libraries. It is illustrated with archival and published Census documents as well as expository materials. The programme has been compiled by Stephen Beaumont, an economic historian, and Michael Breaks, a sociologist, both of whom have had experience of the Census in a research capacity as well as in their work as librarians.
45 slides, approx 30 minutes, £9.50. (The Librarian, University of York, Heslington, York, Y01 5DD).

Guide to the Use of Chemical Abstracts
Primarily intended for undergraduate chemistry students who will normally have some knowledge of Chemical Abstracts as well as a working knowledge of chemistry. This prior knowledge is not essential, and anyone who wishes to know when to use Chemical Abstracts should benefit. The presentation is meant to give students a general awareness of what Chemical Abstracts is and what it can do. Techniques of searching the various indexes are mentioned, but are probably best taught in detail via seminars and practical exercises.
57 slides, 25 minutes, price £19 including post and packing. (The Library, University of Southampton, Soutnampton SO9 5NH).

How to use the Biological Abstracts
This programme is intended for students of the biological sciences who are unfamiliar with astracting publications. It introduces Biological Abstracts as the only source of this type covering the whole biological field and describes its function content and arrangement, including the use of each of the various indexes. The supporting role of Bioresearch Index is also explained and its main features are described.
41 slides, 20 minutes, price £15 (The Library, University of Surrey, Guildford GU2 5XH).

Guide to the Use of the Literature in Medicine and Related Subjects
Primarily a guide for the beginner in the use of medical libraries covering the means of access to primary and secondary literature. It includes the use of catalogues, bibliographies, abstracts and indexes, and computer information retrieval.
80 slides, 17 minutes price £20. (The Medical Librarian, University of Newcastle upon Tyne, Queen Victoria Road, Newcastle Upon Tyne NE1 7RU).

Outline Guide to the Literature of Chemistry
A method of literature searching is outlined in a series of steps, leading through the basic structure of chemical literature in logical sequence: defining terms (producing lists of keywords), introductory works, bibliographies, review articles, citation indexes, lists of periodicals, guides to conference proceedings, theses, patents, standards, research reports and directories of research topics. Examples of both general and specialised sources are given. The current edition has been oversubscribed. Orders taken now will not be filled before Autumn 1976 (enquiries to Mr Davibridge).
55 colour slides, 17 minutes, price £15 (The Library, Royal Holloway College, Egham, Surrey, TW20 0EX):

Guide to Abstracting and Indexing Services
This guide is intended for students who have not previously used abstracts and indexes. After discussing the need for these services, the differences between an abstracting and an indexing journal are explained. The different types of subject index to these journals, including computer-compiled indexes, are illustrated, and other types of index are mentioned. Finally, the function of current awareness publications is explained.
32 slides, 12 minutes, price £10 (The Library, University of Surrey, Guildford, Surrey GU2 5XH).

Guide to British Official Publications
The guide is intended for students in higher education who require an introduction to the nature and use of official publications, both parliamentary and non-parliamentary. It is particularly suited to courses in politics, public administration, law and librarianship. Among the categories of publications which are described and illustrated are Bills,

Command Papers, House of Commons Papers, Debates, Acts of Parliament, Departmental Publications, Catalogues and Indexes. They are introduced in a logical way, using the topic of decimal currency as the theme.
Production of the guide was under the direction of John E. Pemberton (Warwick) with the assistance of Elizabeth Anker (Warwick), Eric Blake (LSE) and Lesley Weddle (Durham).
38 slides, 15 minutes, price £10 inc. UK postage. (The Library University of Warwick, Coventry, CV4 7AL):

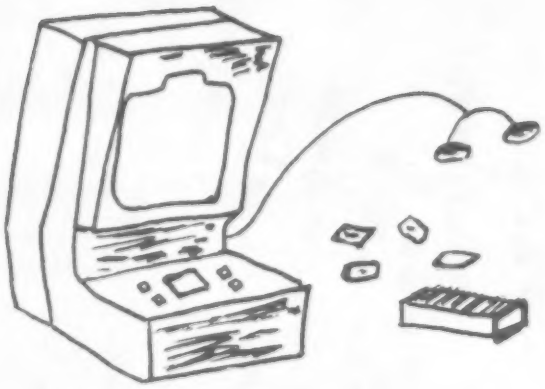
Guide to the London Bibliography of the Social Sciences
A guide to the nature and use of the Bibliography, which is the subject catalogue of the British Library of Political and Economic Science at the London School of Economics. The Times Higher Education Supplement recently described the Library thus:
"The magnificence of the collection is a byword among social scientists. Apart from the Library of Congress in Washington there is no social science collection to match it in the western world".
35 slides, 20 minutes, price on application. (The Librarian, University of York, Heslington, York, YO1 5DD).

Literature Searching for Management Information
Illustrates the structure of the literature of management and how to search it, by means of a case study involving a literature search by an experienced researcher. Designed primarily for postgraduates who are about to begin research culminating in a dissertation or thesis, but can also be used with undergraduates or others embarking on a project or extended essay.
80 slides, 25 minutes, price £18 including UK postage. (The Library, Management Centre, University of Bradford, Emm Lane, Bradford, West Yorkshire, BD9 4JL).

Introduction to Science Citation Index
Intended for anyone wishing to know what SCI is and how it works. For use by individuals or with groups. Explains how SCI is constructed, and describes its main sections, with detailed examples.
50 slides, 28 minutes, (Produced by the University of Dundee Library, distributed by the Institute for Scientific Information Inc., 132 High Street,Uxbridge, Middlesex). No charge for copies.

Introduction to the Literature of Politics
This is aimed at first year research students and intended to introduce them to the main sources for literature searching in politics. However, it could also prove useful to undergraduates preparing dissertations and whose library needs have progressed to the point where they must trace references for themselves. The structure of literature is described in the opening section. This is followed by a simulated search using the political thought of Herbert Marcuse as an example. The main guides and bibliographies, both national

and subject, are illustrated firstly; then the relevant indexing and abstracting services; and finally the sources of information on these and research projects.
80 slides, 25 minutes, £15 (The Librarian, Brynmore Jones Library, The University of Hull, Hull HU6 7RX).



PAPER II 3 November 3 1976

USE OF VIDEOTAPE MATERIAL IN LIBRARY INSTRUCTION

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MEDLINE

I will touch upon the theme of videotape material for library instruction only from the viewpoint of one particular library, that of the Central Medical Library in Helsinki.

The idea of producing a videotape on the facilities for information searching at our library was first discussed a couple of years ago. When MEDLINE became operational in the spring 1973, we found ourselves faced with the task of informing the actual and potential users of our library about the new rapid access to the most recent medical literature. The system aroused such a great interest among medical practitioners, researchers and students that demonstrations were requested to be arranged one after another. However, though the demonstrations were regarded as quite an effective mode of illustrating the retrieval capabilities of MEDLINE, we began to consider other modes, too. This was for four reasons:

first — the reliability of the terminal is not perfect, so that now and then the demonstrations had to be interrupted;

second — the operational time of the terminal is limited so that the demonstration had to take place within the busiest search hours;

third — the room in which the terminal is installed is quite small, so that only a few people could attend the demonstration at a time;

fourth every demonstration occupied an information scientist.

Since we had these difficulties of equipment, time, space and staff in arranging demonstrations on MEDLINE and since we knew that the Educational TV-Unit of the Medical Faculty had already prepared videotapes for some departments of the University, we were rather inclined to experiment with this technique, and so we embarked upon what we came to call a video venture. A team consisting of four information scientists was set up for preliminary planning. The first question to be discussed was the form of presentation:

> would an explanatory account drawn on textural facts or a dramatised story based on live situations convey better the qualities of MEDLINE to the viewer?

The latter alternative came to be considered more illustrative But this decision led to further questions, such as:

> who would write the script?
> who would play the roles?
> who would direct the play?

Eventually the idea materialised like this:

The information scientists' team wrote the script; one of them played the role of the information scientist; the other role, that of the medical researcher, was played by a drama school teacher, an old acquaintance of ours; the dramatic direction was also under his inspiration, while the main technical direction was under the Educational TV-Unit of the Medical Faculty.
The whole process took about three months' work.

CENTRAL MEDICAL LIBRARY AT YOUR SERVICE

When the Faculty of Medicine's Committee on the Curricula Revision informed us early this year that library instruction would be a compulsory subject for the second year students from the autumn 1976 onwards, and as we realised that this would mean:

first — that one hundred or so students should be instructed in the use of the library twice a year, whereas formally there were about ten students participating in the course given once a year only;

second — that we might soon face the problems of teaching materials and methods, as well as those of space and staff,

we began to ponder the possibility of producing another videotape designed for general library orientation.

Another team was set up consisting, this time, of specialists from the cataloguing and lending offices. They, for their part, wrote another script, and another videotape came out as a result of a close cooperation between the librarians' team, the drama school teacher and the Educational TV-Unit. To some extent, the adaptability of our videotapes to the systematic library instruction for medical students was tested by this autumn's course. The lectures on research librarians and their facilities were exemplified by the videotape Central Medical Library at Your Service, while the lectures on biomedical information retrieval systems were enriched by the presentation of MEDLINE. The data from the evaluation forms filled in by the students at the end of the course show that most of them regarded the tapes as both illustrative and informative, however experimental we think they are.

We have also found the videotape,Central Medical Library at Your Service,quite a useful medium in giving an idea of

library orientation to other large groups, such as laboratory and nursing school students, whose studies are related to health sciences and health care practice but whose information needs are more restricted than those of medical students.

So far, no particular course for medical researchers has been organised, but the MEDLINE videotape has served to inform medical specialists at their weekly meetings in the clinics of the Helsinki University Central Hospital.

We have not yet enough data to evaluate the effectiveness of videotape in library instruction. However, though some of the interest our tapes have aroused inside and outside our library may be due to their novelty and soon dies down, some of it may suggest that the video technique, if fully explored can be developed both to rationalize and individualize library instruction.

PAPER II 4 November 3 1976

AUDIO-VISUAL MATERIAL AT ÖREBRO UNIVERSITY LIBRARY

Elisabet Anderson
The Library of the University in Örebro, Box 164, S-701 03 Örebro, Sweden.

At the library of the University in Örebro, audio-visual material is used to show our library service. I would like to show you two programmes, a video-tape and a tape/slide series. The length of the programmes is governed by what we consider to be optimal in such situations. The experience of others has shown that longer programmes without interruptions lose their audience.

The videoprogramme that I will show first is the result of the final seminar of a course on the use of internal television in teaching. The course was arranged by Uppsala University for the benefit of teachers and others in Örebro. We learned how to produce a programme, in other words write the script, do the actual filming and edit the soundtrack; this will be obvious during the programme. It was underlined that TV as a media requires action and that one must also not forget the lighter side. The group was comprised of three teachers, one librarian and one porter. Everybody worked both behind and in front of the camera. The actual recording took a whole 8-hour day. As we only had one camera and no facilities for cutting, all the technical misadventures that occurred could not be corrected and are still on the tape as you will see. In fact this programme is no longer used as the library has since then changed premises and it has been replaced by the slide series.

The main reasons why the second programme is a slide series is that it does not have the disadvantages of requiring the

same trained staff and the costs are less. The advantages of slides are among others, easy editing and updating of the material. However, I still think that video-tape is the better medium for the general presentation of a library; it is more effective in catching and holding the student's attention.

PAPER II 5 November 3 1976

PLANNING FOR A TAPE-SLIDE PROGRAMME ABOUT: LINKÖPING UNIVERSITY LIBRARY AND ITS SERVICES

Annika Lindberg
University of Linköping Library, 581 83 Linköping, Sweden

Description of our problem

It is difficult for us to reach everybody with good information about the library.

There is a tradition that "a library is something boring". Qualified staff are not always available, when we for example have visitors at short notice.

The great number of participants in orientations and courses results in more and more instruction becoming pure demonstrations and every single participant getting fewer opportunities for individual contact with the library staff.

We cannot simultaneously show the 5 branch-libraries in our decentralised library system.

Intentions:

- to make an information programme that can be used in large groups as well as by single students (self-instruction).

- to make an information programme that could at the same time be used as a PR-programme for the library.

- to make a programme that, on one hand can be used in its entirety, on the other, give information about one or the other of the 5 branch libraries.

- to give library infromation in a new and easily comprehensible way.

Restrictions:

Personnel
Costs
Time
Limited distribution facilities
Negative student attitudes towards Video-productions.

Target group

New students
Newly employed personnel at Linköping University
Visitors
Trainees from the library school
Courses in "Information retrieval and library use"
Visits from secondary school students

The target group varies according to age, knowledge and motivation. We therefore have to make the information general and easily understandable.

Objectives of the instruction:

The would-be user shall, after seeing the programme, know which library to visit, what service the library offers, and feel like going there.

Contents:

A description of the five branch-libraries and their main subject fields.
A presentation of the catalogue.
A demonstration of the stock.
Information on the services available.
Information on databased information retrieval.
Information on the courses in "Information retrieval and library use."

Choice of media:

Film

advantages: you can reach a big group at one time,

moving pictures - activity,
colour,

disadvantages: expensive to produce,
difficult to change,
no equipment at the LiU,

Videofilm:

advantages: you can reach a big group at one time,
moving picture,
new medium for library instruction,

disadvantages: difficult to distribute to house A and house B, Valla,
difficult to change,
black and white,
negative student attitude,

Tape-slides:

advantages: you can reach a big group as well as a single student with simple equipment,
you can easily change pictures,
you can either show the whole programme as an entirety or pick out special slides and show them separately,
cheap to produce,
colour,

disadvantages: no motion,

Choice of medium

Taking into account the restrictions, especially the distribution difficulties, the costs, our wish to reach large groups, and our need to be able to show the programme with short notice, we consider a tape-slide production to be the best solution. It is an advantage to be able to change slides, since things change rather quickly in a library.

Because of the structure of the library - branch-libraries - we sometimes want to select pictures and show them separately. Colour pictures catch the attention better than black and white ones. (Cf videofilm)

PAPER II 6 November 3 1976

USING THE UNIVERSITY LIBRARY-A TAPE-SLIDE PRESENTATION

Malcolm Stevenson
University of Sussex Library, Falmer, Brighton, BN 19 QX,England

Slide 1 (Title slide)

Slide 2 Anyone can see at a glance that this second-year student has a problem. A closer look convinces us she has several.

Slide 3 The greatest (or the least, depending on your point of view and hers) is a literary one. Its solution (and of course you've already guessed this) - another job for the University Library. A simple and routine matter of providing her with a book. The most common, but not the only service the Library offers. Our student is reading English in the School of African and Asian Studies. Another page of her notebook for the same week.

Slide 4 Part of a poem mentioned oh so casually in a recent seminar. Of course you know it's in Sanskrit as well as I do - but does she? And does she know how to pronounce it? Well, the Library may possibly be able to help her with that too, through its collection of records and tapes.

Slide 5 No need to labour the point. The student doesn't so much come to the Library for books - more for information. And it's the Library's job to present her with that information in the most suitable form. Now that may be in printed form, or it may be in pictures, films, tapes, or records. This programme is about how the Library sets about that task. Let's start with the most obvious way.

Slide 6 Books. Books that are needed; books that have to be kept in good condition and in the right place. Because, reasonably enough, they're always being moved.

Slide 7 It's hard to guess how many are taken down simply to be read in the building; but we can keep tabs on the number taken out in the course of a day.

Slide 8 It's about two thousand - about twice the number for any university of comparable size. So if, off hand, you know any universities of comparable size, there's a statistic to cherish. Now when those two thousand books start coming back - and this Library has means of ensuring that they do - they've got to finish up in the right places on the right shelves.

Slide 9 Work for a small army of assistants. And mathematicians or punters amongst you will be quick to take a point,here: if books are coming back and being reshelved all the time, and if you desperately need a book that's not where it ought to be the first time you look for it, then it's well worth coming back and trying again the same day, Law of averages, and all that.

Slide 10 — But if doling out books and putting them back in their places were all a Library concerned itself with, it would soon succeed in doing what its critics always and inevitably accuse it of - of losing touch with what is sometimes rather bravely called 'the world outside'.

Slide 11 — The world of the tutorial and the seminar. Intellects locked in deadly conflict - fuelled (if a change of metaphor be allowed) - fuelled with new insights, new facts, the ideas of the latest writers, the results of the most recent research. Can the Library keep pace? For this very purpose there exists the Acquisitions Area.

Slide 12 — This is where trends are spotted, charted over the horizon. McLuhan, Marcuse, who were they? Reading lists for next year - for the next decade are shrewdly anticipated. Ivan Illich and Jacques Monod are still worth backing. And why not take out options on Gregory Bateson? Problem is: how many copies of each?

Slide 13 — You see, a particular book may suddenly become popular ... O.K. 'required' ... reading. And therefore practically unobtainable, at least while a certain course lasts. Result, as you see here: irritation and sporadic outbreaks of petit-bourgeois opportunism. Now the Library has a number of what futurologists call 'scenarios' for dealing with this.

Slide 14 — Script number one. It buys all the copies of any book that will ever conceivably be needed. But at what extravagant cost and with what profligate wastage of shelving space. And observe, for one moment more closely the faces of those it has seen fit to pamper in this way.

Slide 15 — Has the sum of human happiness been increased by one jot or tittle. Quite impossible for a generation irreversibly 'in' to ecology that it immediately pictures some Swedish forest decimated to furnish twenty extra copies of Marx's Grundrisse. Enough, - there's a more economical way and a more usual one of getting you the books that you want - that is that you've been told - to read.

Slide 16 — ...d that's to make a moderate number of trees - er books - that are in really heavy demand available; but only for a short time. And then to levy a fairly draconian fine if you keep them long enough to read. These books are distinctively marked with - we think it's rather an attractive - yellow band; they're kept in a separate part of the Library; and they're called (for reasons that are far too complex to go into here) Short Loan Copies.

Slide 17 Then how about rustling up that book that's not in demand, that's not on the shelf where it ought to be, and which the only other character in the University whom it could possibly interest has read, but won't return?

Slide 18 Well, you can use the Reservation Card system. Which means that the Library Staff can bring what Diplomatic Circles term 'Pressure to Bear' on the unsuspecting present borrower.

Slide 19 Getting the right book to the right reader is only part of the Library's function; it does much more. It provides facilities for uninterrupted and profound study.

Slide 20 Space and comfort on the one hand for reading and literary composition, and on the other that air of purposeful serenity that favours meditation,

Slide 21 and the digestion and assimilation of hard-won intellectual nourishment. Then again, it will keep you au fait with current affairs.

Slide 22 This through magazines and learned journals. Through what is called 'the literature' as opposed to just Literature which you are likely to stumble across almost anywhere around the place. And of course there are newspapers.

Slide 23 And if reading the latest available copy of The Times alerts you to developments in the Paris Commune, then you can discover how it all came about by consulting back issues.

Slide 24 And these are stored - thanks to Mr. Fox-Talbot's invention - on film. On microfilm, actually, so you have fun watching it through a sort of 'What the Butler Saw' contraption. And if you want to listen rather than read - say to those twenty-five lectures on the Philosophy of Hegel you inadvertently missed last term

Slide 25 then you can rest assured that - recorded - they will have lost none of the electrifying magic they had when they were delivered, for want of a better term, 'live'. You see, the Library's got a lot to offer; but if you want your share, you'll have to work at it.

Slide 26 It's not perhaps the easiest place to find your way around at first - especially if you don't take advantage of the cartographic aids provided.

Slide 27 — The walls are liberally hung with plans. You'll find them useful if you happen to have a spatial intelligence quotient somewhat in excess of 140 (and if you haven't, what are you doing here?). Properly used they could take the purgatory so to speak out of locating Theology. Then there's a veritable cornucopia of informational pamphlets.

Slide 28 — And not just general information about the Library either...

Slide 29 — but about special collections of books and periodicals. And in finding books don't neglect (and above all don't be frightened of) the card-index system.

Slide 30 — Learn to use it agressively
But whenever you are in doubt ask the Library staff.

Slide 31 — It's their job to help you. Many of them will have special interests - in the sciences, the arts, or whatever. And, in fact, there's a special section in the Library devoted to giving immediate help to users.

Slide 32 — This is the Readers' Advisory Service. It's a good starting point for the solution of any of your difficult reading or informational problems.

Slide 33 — Where do you look for bound volumes of New Society?
What does the classification code ND mean?
Does the Library have any recent books on Lasers?
Ask the Readers' Advisory Service.

Slide 34 — But for all the help the Library can give the responsibility for learning to use it is yours. Explore, by all means, and browse, but ask questions as well. And if you can't find some of the services you'd expect to find in a Library, tell us about it. Only in this way can the Library keep up with the changing needs of the University in general and you, the student, in particular.

PAPER II 7 November 3 1976

TEXT OF LIBRARY ORIENTATION ON CHALMERS UNIVERSITY LIBRARY

TAPE/SLIDE PRODUCTION

(Translated into English)

(Double-spacing indicates time-pause between slides.)

Do you know that there is a Library at Chalmers

where you can read "Yachting News"

and 4.800 other periodicals ?

The Library is open during term time from 9.00 to 20.00 on weekdays, and from 9.00 to 12.00 on Saturdays.

If you study Chemical Engineering, there is a special Chemistry Library on the first floor.

You can borrow textbooks and compendia...

Periodicals and other books.

At Chalmers Main Library, the greater part of the collection is stored in a closed-access book store.

Therefore you have to fill in a special loan requisition form, which you leave at the circulation desk.

The requisition form is then sent to the store, and your loan material is selected.

The service is quick at Chalmers Library! Average time - 3 minutes per loan.

How can I find out what to borrow, if I can't look at the books?

If you know the name of the author, you can look in the alphabetic author catalogue,

where the cards are arranged alphabetically under the authors' surnames.

If you want to borrow books about a special subject, use the subject catalogue,

where the cards are arranged under different subject headings

On each catalogue card, there is location mark, or store number, for the book.

You must write this store number on your loan requisition form...

otherwise the people who work in the book store won't be able to find the material that you want.

Sometimes you may want to read a book that Chalmers Library does not possess. You can request this material from another library, as an interlibrary loan.

When you have obtained your books, you maybe want to read in peace and quiet. Then you can work in one of the Reading Rooms.

In the main reading room, there are handbooks and encyclopedias available for use. It is easy to find what you want - look at the signs.

Or you can sit comfortably in the periodicals reading room and read the journals.

Sometimes you may want to take a photocopy of something that you have read. Follow the red signs to the Library´s Reprocentre.

Sometimes you may be hungry and thirsty, after all that reading - visit the café on the first floor.

You may want to work with a group of students - make use of one of the "group rooms" available on the first floor of the Library. Ask about this at the Information Desk.

The Information Desk? Yes, that´s where you can receive help for all the questions that you want to ask.

WELCOME

This was a first orientation about Chalmers Library, take a Guide to the Use of the Library, and read about the service and resources available at <u>your</u> Library.

PAPER II 8 November 3 1976

PROJECT-ORIENTATED LIBRARY INSTRUCTION AT ROSKILDE UNIVERSITY

Birgitte Lau

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At Roskilde University Centre all students go through a so-called "basic studies programme" of two years' duration, with emphasis on one of the following areas: social sciences, natural sciences, or humanities. During this intial two-year period every student works on four projects, as a member of a group of students, the project group, which produces a report on a chosen specific problem. This study organisation in turn means that the group must become proficient in searching literature in a variety of fields, and from the very beginning of their university studies.

This type of study organisation raises several problems with respect to library service in general; one of these is the problem how to teach students methods of literature search so that they are able to approach new subject fields on their own. Below, I shall offer a brief description of one attempted answer to this problem, in the form of some major points of a 12-hour course for students in the basic studies programme in the humanities at RUC. The course has been planned and taught by a group of three university teachers and one research librarian, and has been offered since 1974.

The course has had as its main objectives to convey to the students an insight into the problem of literature searching as part of the problems of research methodology as a whole. What has been stressed has been the students' understanding of the connection between the quality of their literature search and the quality of their project work as a whole. An ability to search literature has been viewed not primarily as a set

of techniques, but rather as an integral part of the content of the project work, and as part of the professional qualification process that takes place in the course of a university education.

These objectives have led to certain consequences in the practical organisation of the course, as well as in the content and structure of the course. Some of these are:

1. The time schedule of the course has reflected the intended emphasis on the students' own practice and understanding. The course starts out with a three hour session concerned with themes such as
   1. Discussion of the group members' earlier experiences with literature searching.
   2. Possible goals of literature search work, and
   3. Analysis of project themes as a basis for carrying out a literature search.

   That is, no techniques are taught before the student has a chance to grasp how literature search fits into his project work, and why it is important.

2. On the whole, the course puts little emphasis on teaching the use of specific tools for literature searching such as catalogues, bibliographies and encyclopedias. Only examples of such tools are shown and used on the course. What is emphasised is the characterisation of the situations in which various types of tools may prove useful, so that the student may recognise his situation, even though he has forgotten the name of the various tools.

3. Most examples and exercises in the course are tied directly to the project themes on which the students are working at the time of the course. This is to ensure that they may continually control the relevance of what they are taught.

4. Not just the finding but also the using of literature is dealt with in the course, e.g. problems of evaluating and sorting references found, how to cite literature used, and how to compose lists of references as part of the project report.

The teaching methods used in the courses have been combinations of the following elements: Introductions on the part of the teachers, various types of group work such as discussing or exercises, and plenum discussions.. As an example of how a three hour session may be arranged on the basis of these teaching methods I have included the plan for session 1 of the course described (see appendix A).

Finally I might mention that the course is broken up into four weekly sessions, each lasting three hours, and that the course in concluded by a half-hour evaluation by participants and teachers.

At the moment, a teaching manual for the course is being prepared by the group who have developed the course; this manual is intended for use in various teaching situations in which the authors of the manual may not participate, as well as for self-instruction.

The course described briefly here is meant as an example of ways in which the teaching of literature search may adapt to the structure of the educational institutions of which the library is a part, and is only one of several offers of library use instruction at Roskilde University Centre. Apart from two-hour introductions offered to all new students, longer courses (from six to twelve hours) are offered to basic studies students in the social and natural sciences as well; and specialised courses are offered to more advanced students who have specialised after completing their basic studies, e.g. courses in literature search in History, English, etc. On the whole, there has been a very rapid development in this area during the four years that the university has

existed, even though most of the activities taking place may still be described as being on an experimental level.

APPENDIX A:

TIME SCHEDULE

Theme: The concept of literature searching. Literature search and project definitions. Terminology problems in literature searching.

15 minutes: Introduction to the course as a whole.

5 minutes: Introduction to group work.

20 minutes: Group work: Comparison of two texts describing different literature search procedures, followed by a discussion of the group members'own literature search habits.

40 minutes: Plenum discussion of the results of the group work.

10 minutes: Introduction to group work on search terminology problems.

30 minutes: Project groups make brainstorming on their own project themes, trying to write down important concepts for their own literature search.

60 minutes: Plenum: Analysis of results of brainstorming. Teacher's introductions to terminological problems, use of tools such as encylclopedias to analyse relevance of concepts.

PAPER II 9 November 3 1976

THE SELF-GUIDING MATERIAL AT CHALMERS LIBRARY

Nancy Fjällbrant

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The seminar delegates made a tour of Chalmers Library, in order to study the use of colour signposting and self instructional material.

1. Colour signposting

During their first weeks at Chalmers University the freshers pass through a series of "initiation rites". The students are known as the "nollas" or the nothings, and have to wear a card with a large O during the first month. Each of the six Schools of Engineering has its own special colour and the O card is printed in the colour of the wearer's School of Engineering. Therefore this colour should be one of those facts that a new student has a reasonable chance of learning during his first weeks at the University.

The colours of the Schools of Engineering are as follows:

Architecture	red
Chemical Engineering	green
Civil Engineering	blue
Electrical Engineering	yellow
Engineering Physics	black
Mechanical Engineering	brown

It would be reasonable to base any colour location scheme on this colour scheme with which the 4,000 engineering undergraduates are familiar.

With such a colour-coding scheme, material pertaining to for example, electrical and electronic engineering is coded with yellow symbols - the colour of the School of

Electrical Engineering. This should help students to select relevant material for their needs more quickly and easily. The colour-coding gives a first indication of useful material.

At Chalmers University Library there is only a very limited amount of material on open access, so any colour-shape system can be fairly simple. Symbols have been chosen to represent different types of material to be found in the library:

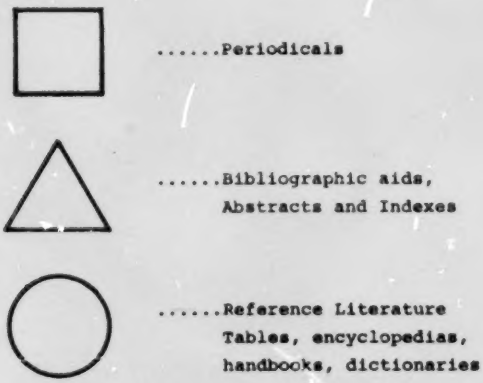
.....Periodicals
.....Bibliographic aids, Abstracts and Indexes
.....Reference Literature Tables, encyclopedias, handbooks, dictionaries

Fig I. Symbols representing the different types of material to be found in the library.

The use of the different symbols for different types of material has been used primarily to help with location, but in addition, this symbol representation would also help to make the students aware of the different kinds of material possessed by the library.

Self-guiding material

Clear signs have also been used to show the whereabouts of various tools and services - such as the catalogues and the reprocentre.

A large poster sign has been made, showing how to fill in loan requisition forms for the three most common types of

material borrowed - books, periodicals and parts of series.

Accessibility of literature

At the present time, much work is going on to increase the accessibility of the literature at Chalmers Library. During 1976, reorganisation of the chemistry collection has been carried out - the most recent material is available, on open-shelves in the Chemistry Library and the older material previously kept in closed-stacks, has been made available on open-shelves on the ground floor of the book-tower.

Group Discussion II November 3 1976

THE PRODUCTION OF TEACHING MATERIAL. POSSIBILITIES FOR INTER-LIBRARY COOPERATION

Lars-Erik Sanner (Chairman)

The second day was concluded with a discussion on the possiblity and desirability of cooperation between libraries, university teaching departments and the library schools in the production of material for user education. The following questions were discussed:

1. Which material is suitable for cooperation?
2. Does cooperation affect the structure of the material?
3. How is cooperation going to be managed practically?
4. Are there any alternatives to cooperation?
5. How is cooperation going to be administered?
   - Which organisation is going to be responsible?
   - How can reports on material/projects be collected?
   - How to finance the administration?

Cooperation was generally thought to be desirable and/or necessary and was considered at various levels:

(a) Active cooperation on the development of common projects.
(b) Division of work between various producers of material.
(c) Exchange of material between different organisations and libraries etc.

The second and third alternatives were considered to be the most practicable.

It was suggested that the production of printed material - such as guides to the literature in different subjects - was a suitable area for cooperation; the production of subject bibliographies and 'pathfinders' might prove suitable projects at Library Schools. It was felt that cooperation in the production

of non-print media would be more difficult, and that any collaboration would be primarily subject orientated. Material suitable for joint production would necessarily be of a general character. All four groups suggested that a central reference collection of user instruction material was desirable and Chalmers University Library was named as a possible place for this. In connection with this central collection, information should be distributed - in the form of a project catalogue, and current bibliographies. Procedures for collection of material were discussed.

Three of the four groups suggested that a Nordic Committee be set up to deal with the subject of library user education, whilst the fourth group suggested the forming of national committees.

It was suggested that financial support for the central reference collection etc. would be necessary, and that NORDINFO might be a possible source for this support.

PAPER III I November 4 1976

EVALUATION OF USER INSTRUCTION - AN INTRODUCTION

Nancy Fjällbrant
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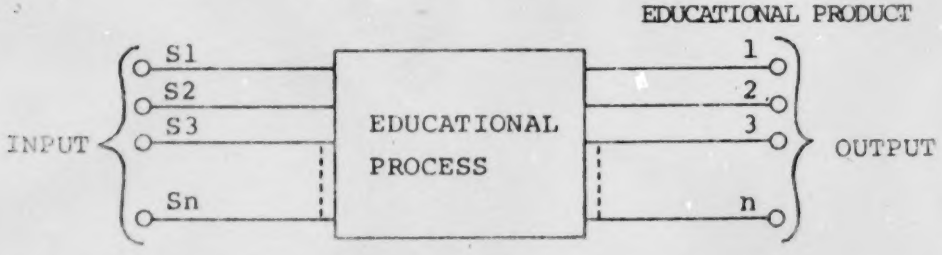
I. Introduction

The purpose of evaluation has been described as follows (Ref.1) "The fundamental purpose of evaluation is to produce information that can be used in educational decision making". Educational decisions involve choices between available alternatives which are based on both educational and economic factors, and which often involve subjective judgement and value decisions. The role of evaluation is to provide information which can be used for rational decision making. Thus evaluation can be used for decisions about whether to continue or terminate a given course, about the modification of an existing programme, or about the adoption of an innovation. Evaluation can be considered with respect to several parameters: the target, scope, methods used and timing. This paper will briefly describe evaluation with respect to these four parameters.

II. The targets of evaluation

An education course or programme can be represented in the following diagram (Fig.1):



where S = Student input (state of pre-knowledge) etc.

Fig.1. Relationship between educational process and educational product.

III. The scope of evaluation

Evaluation may be carried out with regard to specific educational courses or to general educational systems. A distinction may be made between assessment and evaluation:

Individual assessment is concerned with the specific achievement of the individual student with regard to his contemporary student group or to prespecified goals.

Evaluation is concerned with the effects of a given educational course programme or system.

In terms of Fig. 1, assessment is concerned with individual output measurement. However, as can be seen total individual output for a given course with regard to pre-specified goals, can be used in the measurement of the effects of educational processes, if other variables are controlled.

IV. Methods of evaluation

Evaluation can be classified according to the method used for the collection and analysis of information. Three main types of evaluation can be described (cf. Howe and Delamont 1974, Ref. 2):

1. The "psychometric"
2. The "sociological or management"
3. The "illuminative or responsive"

V. Psychometric evaluation

Psychometric evaluation is based on the assumption that it is possible tc expose experimental and control groups to different treatments and measure the results of this by means of psychometric tests, achievement tests or attitude scales. Pre-tests and post-tests are given to both groups, and the analysis is concerned with establishing significant differences in the performance of the two groups. These are then attributed to the

variable being studied - the new course. This method assumes that "irrelevant" variables can be controlled, an assumption which is, in many cases, completely unjustifiable. In addition, this evaluation procedure is concerned with measuring output in terms of pre-specified goals and no attention is paid to unexpected effects.

IV.2. Sociological evaluation

The management or sociological approach to education evaluation has developed from the discipline of industrial sociology. This method is used in the study of changes in the structure of an organisation or the roles of the participants in an educational programme or a specific institution. This type of evaluation makes use of interviews and questionnaires. Participant observation is employed in many cases as a complementary method. Attention is focussed on the organisation undergoing change, rather than on comparison with any control group.

IV.3. Illuminative or responsive evaluation

During recent years there has emerged a third type of evaluation which emphasizes participant observation and interviews as a means to obtaining an overall view of educational programmes. This type of evaluation has been called "illuminative" observation by Parlett (Ref.3,4) and "responsive" evaluation by Stake (Ref. 7). Illuminative evaluation is not limited by the initial formulation of aims but allows for the expression of unexpected results. The actual implementation of an innovation is regarded as the most important part of the study. Research is focussed on what is actually happening in response to the innovation. Questionnaires and achievement scores may be used but they are rarely given high priority. One objection that is raised with regard to this type of evaluation is the difficulty of being objective.

V. The timing of evaluation

In 1967 Scriven pointed out the distinction between formative and summative evaluation. This distinction is partly based on the timing of the evaluation, and partly on the purpose for which it is intended:
Formative evaluation is carried out during the development of a course or programme and provides direct feedback about the functioning of the different parts of the programme, thereby giving information which can be used to modify the educational process.
Summative evaluation is concerned with the evaluation of the educational programme as a final product.

Thus formative evaluation provides information which can be used to improve a course, whereas summative evaluation could be used to provide information about the overall worth of a given course, to help in the decision as to whether or not the course should be continued.

References

1. Astin, A.W. and Panos, R.J., "The evaluation of educational programs" In: R.L. Thorndike (Ed) Educational measurement, 2nd ed. Washington 1971. pp.733-751
2. Howe, J.A.M. and Delamont, S., "Towards an evaluation strategy for CAI projects" Bionics Research Reports No. 15(1974) Bionics Research Laboratory, School of Artificial Intelligence, Univ. of Edinburgh,(Edinburgh)1974.
3. Parlett, M., and Hamilton, D.,"Evaluation as illumination: a new approach to the study of innovatory programs." Occasional Paper. Centre for Research in the Education. Sciences. University of Edinburgh,(Edinburgh)1972
4 Parlett, M., "The new evaluation" Trends in Education Vol. 34(1974)13 p.13.
5. Stake, R.E., "Program evaluation, particularly responsive evaluation", Reports from the Institute of Education, University of Gothenburg No.35. Gothenburg. 1974.

PAPER III 2 November 4 1976

EVALUATION: PROBLEMS AND PRACTICE

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Traditionally, librarians teaching the use of libraries and literature to their readers have relied on intuition, on their own real or supposed knowledge of student needs, and on whatever informal feedback was available during the course of an instructional programme. On the basis of such evidence they have modified their teaching and sought to improve its effectiveness. This is a continuous process in which all teachers are involved, irrespective of subject. The purpose of evaluation is to place this evidence on a sounder footing and to make it as complete and as accurate as circumstances permit.

Evaluation is broadly and simply defined by Cronbach as the "collection and use of information to make decisions about and educational program" (Cronbach 1963). What are the important decisions in the context of user education programmes? A survey of the existing literature provides one answer by revealing the large number of comparative studies of instructional methods that have been carried out. One, (Kuo, 1973) involved the assessment of six different forms of instruction applied on supposedly similar classes of students. The question often asked is this - "Is the new method more effective than existing methods?"

This type of evaluation has been called the "agricultural botany method". The basis of this model is the comparison of groups of students who, rather like groups of plants,

are tested before experiment (plant seedings would be weighed or measured) and then submitted to different instructional methods (the agricultural equivalent of different fertilizers). At the end of the experiment they are tested again to see which group has shown the greater amount of learning (growth in the case of the seedlings).

The numerical results that can be obtained from this type of study are apparently objective and capable of generalisation to other situations. Therein lies the danger since the method relies on the assumption that the groups of students being compared are the same in every way except for the different instructional methods to which they are being subjected. This may be true for plant seedings but is obviously not true for people. No two people react in exactly the same way to any given situation as they will have a unique combination of previous knowledge, cultural and social background, personality, etc.

A more relevant question that should be asked is - "Is the method doing what is demanded of it?" E.g. if the object of a library orientation programme is that the student should know the location and use of the catalogue and the library's main services, then does the programme fulfil that function? This might be called the "objectives model" since it is based on a systematic model involving the specification of objectives often used in curriculum development.

This approach can be considered in terms of three basic steps:

1. A careful analysis of course material to define what the learner should achieve (OBJECTIVES)
2. A consideration of the methods and techniques available for the course (METHODS AND TECHNIQUES).

3. An evaluation and revision of the course in terms of the level of achievement set for the course (EVALUATION).

This type of approach has been employed in the evaluation of some of the SCONUL tape/slide guides to library instruction. It is a useful approach as at the present time there is a lack of definitive research evidence in the area of course development. A systematic approach of this kind offsets this since it tests course materials with students in the practical situation enabling improvements to be made after judging their performance in terms of the levels of achievement set.

If we look at the objective of user instruction they appear to fall neatly into two main classes of objectives classified by Benjamin Bloom and his associates (Bloom 1956; Krathwohl, Bloom and Masia, 1956), namely the affective domain and the cognitive domain.

The affective domain is appropriate because many introductory orientation programmes are designed to make the student feel familiar with and 'at home' in the library and to make him feel that it can be a good place to work in; the cognitive domain, because the use of the catalogue and of a variety of library tools can be analysed into a sequence of knowledge skills.

Instruction in the use of library tools has an important advantage over the work given in many academic courses, namely that it is concerned with specific skills/techniques. This means that you know when a student has grasped a particular piece of instruction because he can go ahead and actually use a particular library tool.

This method would thus seem capable of answering the question - "Is the method doing what is demanded of it?"

in terms of the objectives set for a programme of library instruction. The problem here is that while in the SCONUL tape/slide scheme we have been concerned with analysing specific instructional sequences e.g. on the use of Biological Abstracts, in the context of total user instruction programmes it is not possible to completely specify the objectives of the programme. I am particularly conscious of this since I see the need for user instruction programmes in the context of the desirable outcomes for a student of a university education. I see the library as aiding the process of developing the student so that he is able to collect evidence, think about it and act on it for himself. It would be difficult, if not impossible to quantify these processes into testable objectives. People are not predictable units and consequently no simple process of defining objectives and testing to see if these have been achieved will suffice. Evaluation of people and systems must take account of such complexity.

One possible solution is that of "illuminative evaluation" advocated by Parlett and Hamilton (Parlett and Hamilton, 1972) who propose a framework relating to research in social anthropology, psychiatry, and participant observation research in sociology. The stimulus for this alternative determines its direction: the evident need to broaden the base of traditional evaluation and to relate it more realistically to the actual context of the teaching and learning process with all its complexity and subtlety. "Illuminative evaluation takes account of the wider contexts in which educational programs function. Its primary concern is with description and interpretation rather than measurement or prediction." The idea is thus to give evaluation a humanistic rather than a scientific base, and the result is not a closely defined sequence of operations to be followed, but a general strategy, with each investigation treated as a separate case with

techniques adapted to suit its particular requirements.

I do not wish to pursue the method of illuminative evaluation in this paper, nor to take any of the methods of evaluation to greater depth since that is the subject of our next speaker. Instead I should like to return to the "objectives model" and to explore this a little in the context of the SCONUL tape/slide scheme. I have, however, given a selected list of references on evaluation in my bibliography to help anyone who wishes to take this further.

The following extracts from "Notes for guidance on the preparation of materials under the SCONUL tape/slide scheme" give some indication of the way in which librarians concerned in the scheme should be evaluating their tape/slide material.

"The essential features involved in the production of material under the SCONUL tape/slide scheme are:

The Working Party Concept

A key concept is the system whereby each presentation is the joint responsibility of a small working party consisting normally of representatives of three libraries. Ideally the members of each working party should be in reasonable proximity to each other, to facilitate meetings and to avoid having to conduct most of the discussion by correspondence. One member of the working party will normally undertake the actual production work and must therefore have access to the necessary facilties for producing slides and making recordings. The other members will be called on to contribute ideas, to comment on draft scripts and to assist in criticism and evaluation. The precise way in which the work is to be shared out is for each working party to decide.

Experience has proved that if the working party operates successfully, there will be a valuable interchange of ideas and criticism between the member libraries, thus contributing to a continuous improvement of the presentation during the production process. It is also important that when the preliminary version of a presentation is completed all members of the working party should attend a trial showing and discuss jointly the effectiveness of the presentation.

The acceptance of the SCONUL Group's guidelines for production and evaluation

Summary of procedures

1. The members of the working party, preferably in consultation with an educational technologist define the target population and formulate the aims and objectives.

2. The producer prepares a draft script and a list of slides and circulates these to other members of the working party for comment.

3. The script and list of slides are modified as necessary.

4. Production work is begun and a preliminary version of the presentation completed.

5. A trial showing is arranged for all members of the working party.

6. The presentation is modified as necessary following comments and discussion at the trial showing.

7. The presentation is shown to a sample target population, using appropriate questionnaires.

These might include questions to measure whether the objectives have been attained and a diagnostic test to indicate technical faults in the presentation

8. Further modifications are carried out as necessary

9. Steps 7 and 8 above should be repeated until the presentation is considered to meet its objectives satisfactorily.

10. The presentation is released for sale and a deposit copy sent to the British Library Lending Division.

11. The British Library Lending Division will send out an evaluation questionnaire with the loan copy. The draft for the questionnaire will be supplied by the producing library, to which the completed questionnaires will be returned.

12. The producer will send similar questionnaires with sale copies.

Examples of questions (and answers) to measure whether objectives have been attained

BEILSTEIN

Question - State the major limitations of Beilstein.
Answer - Coverage is only up to 1949 and therefore it is of no use for recent searching.

BIOLOGICAL ABSTRACTS

Question - State which of the three types of subject index is most suitable for general use.
Answer - The BASIC Index.

MEDICAL LITERATURE

Question - State the kind of sources to consult to locate journal articles on particular subjects.
Answer - Abstracting and indexing services.

Example of questions from the diagnostic questionnaire designed to indicate technical faults in the presentation

Is this a good way of learning?

- A very good way
- A fairly good way
- No feelings either way
- Not a very good way
- A very bad way

Did you understand the information or was it -

- Too easy
- Easy
- About right
- Difficult
- Too difficult

Could you see clearly what was on the slides?

- Always
- Most of the time
- Not much of the time
- Never

In your opinion did the slides generally

- Reinforce what was said
- Add nothing to what was said
- Distract from what was said

BIBLIOGRAPHY ON EVALUATION

Bloom, B.B. (Ed.) Taxonomy of Educational Objectives. Handbook 1: Cognitive Domain. McKay, New York. 1956.

Bloom, B.S. et al. Handbook on formative and summative evaluation of student learning. McGraw Hill 1971.

Brewer, J.C. and Hills, P.J. "Evaluation of user instruction" Libri 26 (1976)1, pp 55-65

Caro, F.G. (ed) Readings in evaluation research, Russell Sage Federation, New York 1971.

Crossley, C.A. and Clews, J.P. Evaluation of the use of educational technology in information handling instruction: a literature review and bibliography submitted to the British Library, Research and Development Department 1974.

Cronbach, L.J."Evaluation for course improvement" Teachers College Record, 64 (1963): 672-683.

Dressel, P.L. and Mayhew, L.B. General education: exploration in evaluation. Council on Education, Washington.1954

Eash, M.J. Evaluating instructional materials. In Audio-Visual Instruction. 1972. Vol. 17 (10) p. 12.

Eraut, M.Strategies for the evaluation of curriculum materials in Aspects of Educational Technology VI 1972. Edited by Austwick, K. and Harris, N. p. 238

Fjällbrant, N. Evaluation in a user education programme. (To be published) in J. Librarianship. Vol.9.(1977)2

French, J. The evaluation gap: state of the art in audio-visual reviewing. in Library Journal 1970 Vol.95 (6)

Furst, E.J. Constructing evaluation instruments. New York David McKay Co. 1958.

Hamilton, D. Curriculum Evaluation. Open books, London 1976

Krathwohl, D.R., Bloom, B.S., and Masia, B.B. Taxonomy of Educational Objectives II: Affective Domain. McKay, New York. 1956.

Kuo, F.F. A Comparison of six versions of science library instruction. Coll.Res.Libr., 34 (1973): 287-290

Larkins, A.G., and Shaver, J.P. "Hard-nosed research and the evaluation of curricula" In Review of Educational Research 1972. Vol. 73

Lubans, J. "Evaluating library user education programs". Drexel Library Quarterly, 8(1972): 325-335.

Macdonald-Ross, M. Behavioural objectives - a critical review In Instructional Science 1973 Vol 2. p. 1-52.

McIntyre, R. Evaluation of instructional materials and programs. In Exceptional Children 1970 Vol.37(3).p.213

Meuwese, W. Evaluation mechanisms for educational systems. In British Journal of Educational Technology 1971 Vol.2. p. 57.

Newren, E. Comparative techniques for media evaluation. In Audio-Visual Instruction 1971 Vol.16 p.30.

Parlett, M. and Hamilton, D. (1972) Evaluation as illumination: a new approach to the study of innovatory programs. Centre for Research in the Educational Sciences occasional paper 3.

Popham, W.J. and Baker, E.L. Systematic Instruction. Prentice Hall 1970.

Scriven, M. The methodology of evaluation. In Stake, R.E. (ed) Perspectives of Curriculum Evaluation No.1. Chicago, Rand McNally 1967.

Stake, R.E. The countenance of educational evaluation. In Teachers College Record 1967 Vol. 68. No.7. p. 523.

Stevenson, M.B. Problems and evaluation of reader instruction in British University Libraries. MA Thesis (Univ. College, London, 1973)

Stufflebeam, D.L. et al. Educational evaluation and decision making. F.E. Peacock. Itasca. Illinois. 1971.

Tyler, R.W., Gagne, R.M. and Scriven, M. (eds) Perspectives of curriculum evaluation. Rand McNally & Co.,Chicago.1967

Vogel, J.T. "A critical overview of the evaluation of library instruction". Drexel Library Quarterly. 8(1972): 315-323.

White, J.P. The concept of curriculum evaluation. Journal of Curriculum Studies 1971. 3.2.

Wiseman, S. and Pidgeon, D. Curriculum evaluation. National Foundation for Educational Research 1970.

Wittrock, M.C. and Wiley, D.E. (eds) The evaluation of instruction.Holt, Rinehart and Winston. 1970.

Woolls,B. Evaluation and previewing. In Audio-Visual Guide. 1972 Vol. 51 p. 4-7.

PAPER III 3 November 4 1976

USER INSTRUCTION - EVALUATION METHODS IN A WIDER FRAMEWORK

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"I'm at my best in something where the answers are mostly a matter of opinion". (Charlie Brown)

This paper will be far too limited to go into details of all the possible means and methods for the evaluation of library user instruction programmes. In addition I also think that any evaluation method for a user instruction programme in real life will have to be developed in close contact with that particular programme, and such clever librarians as you are, should be able to find your way to suitable measurement techniques for your specific programme. In this paper I will therefore concentrate on what I have named Macroevaluation. That is, I will just mention very briefly some of the more common methods used. Then I will go on to some of the lesser mentioned subjects also dealing with user education - fringe subjects which are often overlooked when it comes to evaluation but which are nevertheless of vital importance in the total understanding of library use and the librarian/user relationship in particular. So instead of giving you a complete list of every conceivable evaluation method, I will raise some questions dealing with certain aspects of library services as a whole. Effects which can tell us something about user behaviour and library use in the wider framework of the goals of the library, where good service involves the delivery of the maximum relevant information.

User instruction programmes can operate on many levels. For our purpose here I will divide them into two categories. One is the short-range programme aimed at a more or less immediate effect, usually designed for one particular library. The other is the long-range planning, on the policy level, as reflected for instance in a country's total educational programme, or as

put forward in international programmes dealing with the organisation of information and learning. For both categories, it may seem as if the educational developments on the whole in the international scene are working towards what librarians are trying to achieve with their varieties of user instruction programmes. Due to the growth of information at an exploding rate, all kinds of schools have been, and will be even more, forced into focusing the teaching programme on how and where to find information for later use. You learn methods for understanding and for information retrieval more readily than plain facts about a subject. This is presenting the situation in a very simple way, but nevertheless this will serve as an adequate description of the educational field. For librarians this has been very clearly pointed out in the NATIS - programme (1). Among the objectives mentioned for national and international action one will find:

Objective 2: Stimulation of user awareness
"In order to increase user awareness, appropriate bodies, including universities and other educational institutions should include in their programmes systematic instruction in the use of the information in all the elements of NATIS". Consequently "Use of libraries should therefore be a part of instruction offered from the primary school level onwards so that seeking information becomes a normal part of daily life. The content of these programmes should be expanded as the advance through the educational system progresses". The long-range effects from user studies are further developed in

Objective 4: Assessment of user's needs .
"Surveys should, therefore, be promoted by the control body through questionnaires and other means to determine the needs of users of information.

NATIS should be designed on the basis of these analyses in order to offer the type and quality of service hoped for by users."
So much for NATIS, which together with similar movements in the educational field, gives a reasonable hope for more intelligent library use in the future. But this is among the long-

range factors; what about all those factors affecting library use here and now, and in particular what are the effects of user instruction programmes?

Before we say anything about evaluation it is necessary to say something about librarians and users (in our situation mostly students) and their perception and expectations of library services. J. T. Vogel (2) has been studying this and among his central questions were:

1. Do librarians know what the student(user) perceives about the services of the library?
2. Do librarians know what the student (user) really needs to know (or perceives as necessary to know) about the library?
3. Do librarians know who the student (user) is most likely to approach if he has an informational need?

I dare say that many librarians, with respect to services in their own library, don't know the answers to these questions. As for Vogel and his investigations this made him raise the question of whether there was a basic conflict of attitudes and interests between students (users) and librarians. Of course this is not so, most of us would say, we most certainly would not be working in opposition to the strivings of the user. Certainly not, not knowingly , I will agree on that. But then again, how much do we know?

Another matter should also be considered before we start to examine the different aspects of evaluation. What we are talking of is the process of finding out how well we are doing whatever we are doing? That involved certain operations and certain standards of performance and what we do we could call evaluation or measurement or assessment or maybe some other word I don't know. So when I am talking of evaluation, please don't hesitate to use another name if that makes you feel better. The main point is that we are talking of the same thing. So whether we call it evaluation or not we should be considering

the targets, the scope, the methods and the timing of our library performance, and the information thus gained should enable us to know more about what to do next. This means that evaluation can be initiated in many ways. Evaluation may for instance be desirable when

a) you think you are doing well but feel unappreciated
b) you are in serious trouble
c) someone with authority over you insists that you be evaluated.

All of these examples and particularly the last one underline the fact that most libraries are part of a larger institution, and usually among its more vulnerable parts when it comes to budget cuts and so on. This is still not the main point. For when it comes to evaluating library service and especially user instruction programmes as an integrated part of these services, the main focus should be on user behaviour and the net gain in intelligent information use as a result of the library's services.

A simple diagram may clarify this point. (See figure 1)

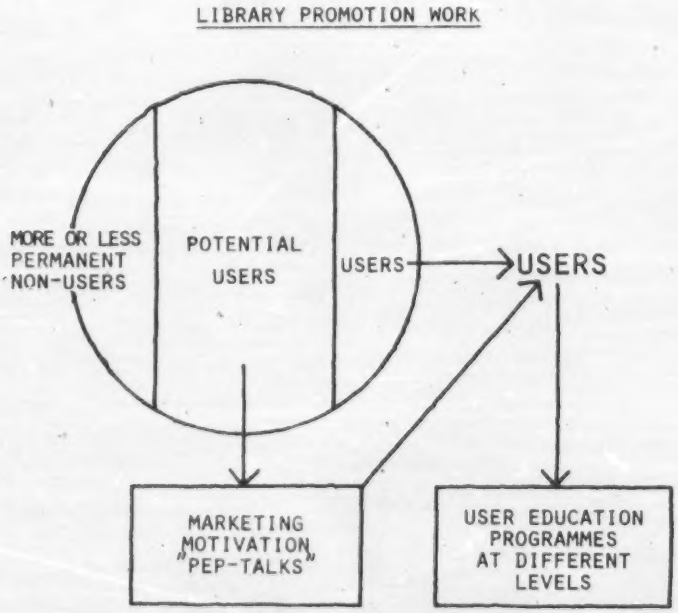

Fig.1.

What we are after are, ultimately, some positive (as seen from the information use point of view) changes in the behaviour of the user, which will enable the user, preferably by his own help, to exploit the information retrieval system of the library to the maximum benefit for the work he is doing. This is what we are after, and this should not be confused with (however necessary these are felt to be) all those programmes made up for relieving staff or in desperate occasions for mere survival. Admittedly there are lots of possibilities for fruitful combinations, but far too many times I have seen the aims of a library service being trapped to starvation in ambitious user instruction programmes. And for most of these programmes it would be fair to say that the more ambitious the objectives, the more difficult will be the evaluation.

Suppose then that we are in agreement that the ultimate goal of user instruction should be: to change the behaviour of the user. A closer look would reveal that this would involve at least two important but very different aspects. First we have the cognitive aspects which implies knowing, conceptualising and comprehending to name some of the processes involved. Second we have the affective aspects which deals with attitudes and values. All studies seem to indicate that most user instruction programmes concentrate on the cognitive aspects. This includes all kinds of programmes ranging from library introduction and finding your way in the library (there's the toilet and there's the catalogue-room, so you don't confuse them) material about literature searching based on Chemical Abstracts or Medline. On the whole learning the "language" of information retrieval and how to "behave" in a library. Programmes designed to create cognitive responses can also be more easily evaluated than programmes aiming at the affective aspects, because attitudes and values are long-range variables which are not easily altered by learning how to behave within a given framework. Knowing how to use a compass, and given a map

you can read, do not necessarily make you an explorer. In some sense we might talk of different levels of changing behaviour, and the affective level is hardest to reach.

If we turn to research in psychology and education, that will not give us much encouragement. From the summing up among these findings one will learn that the impact of print on adult behaviour is generally unimpressive and almost always unpredictable. (So much for your information booklets, leaflets, pamphlets, maps etc.) Adult behaviour is rarely altered by the printed word - most adults read in order to reinforce already existing attitudes and opinions. Attempts to alter attitudes often lead to supporting the existing attitudes. Not much hope I dare say. Well, it is fortunately not as bad as it may sound. Many cognitive programmes of user instruction do function quite well according to their intentions. And again, time is on the librarians side when it comes to learning a new set of attitudes and values concerning information retrieval through the school system. More and more, learning a subject will mean learning the information retrieval system of that subject as an integrated and natural part of the learning programme.

So we ought to bear in mind both the cognitive and the affective aspect when we are designing our user instruction programme. And we ought to provide ourselves with some basic facts about how this programme is changing the user's behaviour which again means that evaluation of user instruction programmes should be based on some kind of performance measurement. Measurement here is performance descriptions in quantitative terms, which may be used in the rating or assessment of the programmes' effectiveness and worth.When it comes to measuring library performance there is a long list of different methods and problem areas like:

- Inventories, interviews, checklists
- Mathematical and statistical techniques
- Operations research (cost effectiveness studies)
- Measure of circulation
- Measures of technical processing
- Measures of reference services
- Measures of collections
- Availability of material
- Use of facilities
- Nature of staff/user interaction

Each of the techniques will, as I said to begin with, have to be studied in depth in connection with the actual user instruction programme to be examined. There is no shortage of good descriptions on how the methods could be applied, so I do not intend to pursue the matter further. Also the problem area to be investigated should be given some thought. There are many good methods and much information to be collected but do we need it? To rephrase an old Norwegian saying: If it's not worth doing, is it worth doing it well? While one contemplates on this, the following is vital to bear in mind:

- Measurement is a process not a product
- Measurement also requires value judgements. Like what to measure and how to read the results
- Measure only where it makes sense to do so

So, at its best measurement provides us with the information about alternatives and consequences which really is the basis for any evaluation.

In the paper by J. T. Vogel referred to earlier, he has listed five different ways of providing library instruction to users.

1. Do as mostly done today - improving cognitive skills - mostly without evaluation.

2. Improving cognitive skills in planned programmes, with evaluation.
3. Improving cognitive and affective abilities, based on needs, objectives and evaluation.
4. Supplement 3. with willingness to provide information to users who do not want or who are unable to develop cognitive and affective abilities. (Like one-time or occasional users.)
5. Ignore library instruction entirely and simply provide information on demand.

These five ways of handling the problem are in varying degrees trying to cope with the different requirements and wishes mentioned earlier, ranging from long-range effects to survival programmes. What they all have in common is that they indirectly do point at time as the most important resource of the librarian. And consequently the use of the time of librarian becomes a vital part of any evaluation of the kind we are dealing with.

This brings us to the aspect of costs. For most libraries the "man" factor is the most costly in the library - and many libraries have already for quite a time been forced into a desperate manpower shortage. And the predictions are clear. Manpower costs will be rising (if you are lucky enough to get any new members of your staff) and costs of machine services, especially computers, will be declining. This raises a number of questions for the user instruction programme evaluation, like, for instance, the question of production costs. Should librarians be making tape/slide guides or any other special programme requiring expert knowledge in audio-visual media etc? Is this a reasonable use of resources? And what about the results from such work today when everybody is more or less familiar with the whole range of the new media in their perfect design. Needless to say this has created in the user a total mercilessness towards amateurism in these fields. From the manpower costs one should therefore do some thinking on what should be the main working area for the librarian. Many user instruction programmes stress the importance of individual guidance. It is not a self-evident truth that individual help

is the best method of user instruction. For instance, do one-time users stimulated by promotion programmes eventually become confirmed users? Maybe, but promotion costs should be looked upon much more in terms of total costing. The greater the number of users, the more important will be the aspect of costs.

Since the librarian here is the key person the cost aspect as derived from the use of his time and other resources will be to a great extent, determining the level of communication at which the user instruction programme is to operate. Here again a simple drawing may clarify my point. (See figure 2)

WHAT ARE LIBRARIES DOING AND

FOR WHAT PURPOSE ?

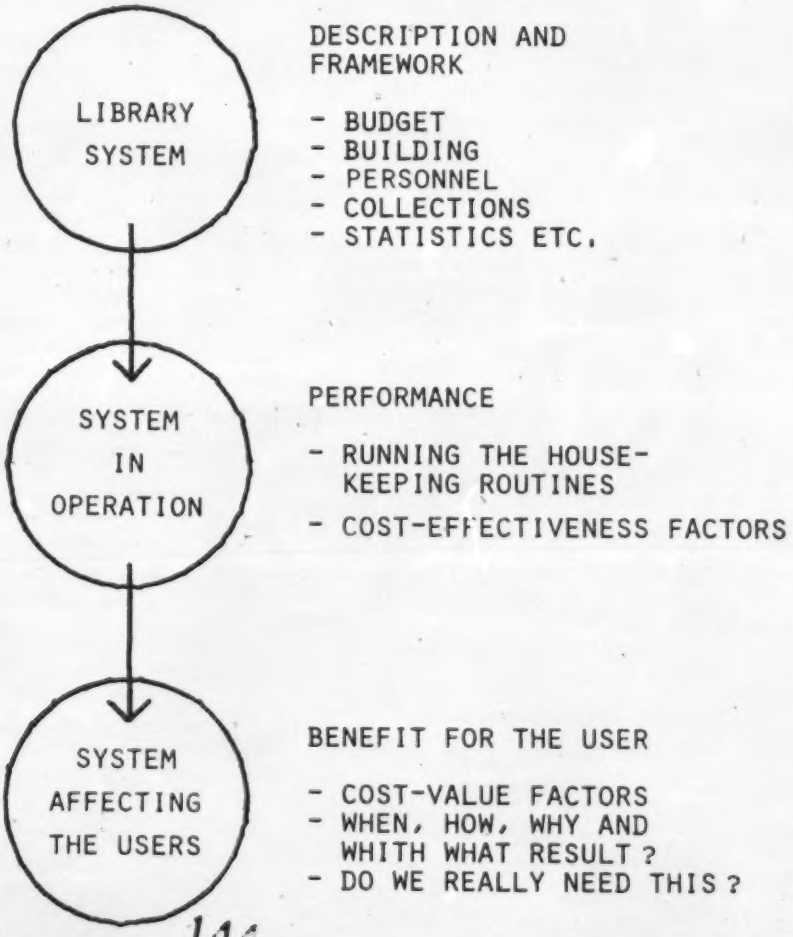

Fig.2.

As shown in Figure 2 the number of library users in a given population will normally be rather small. The majority would be in the area of potential users - and a small proportion would be more or less permanent non-users. (This would obviously differ from one library to the other.) The main difference between the two groups, users and potential users, is the approach in user instruction programmes. The users are "saved" (and hopefully the attitudes and values are tuned-in accordingly) and would probably profit quite a lot from more "cognitive" programmes. The potential users are everything from ignorant, not knowing or indifferent,to downright negative. Here is the area for "marketing" and promotion work - "pep-talks" and motivation work. If they are sufficiently interested then they go on to other programmes. And remember this is in the long-range perspective if you are after lasting results. There is no such thing as an instant library service, just add users ! All user education programmes and promotion work should be measured against the principles of authentic learning, which requires that for lasting results the learning should be meaningful for the learner and it should possess certain abilities of transfer to new situations.

Before we leave the question of costs and promotion work, I would like to mention that costs may mean different things to the librarian and to the user. This simple fact has many implications, but one is of special importance to librarians. Do bear in mind that users get information from numerous sources other than libraries. Most of this information will be available to the user at no cost for the library, if only the librarian or the user or both of them knew. So if information can be acquired by the user at no cost to the library, how does the librarian avoid turning it into a cost by duplicating the "free" information already there? This is really a question which calls for macro-evaluation.

I will end this paper by talking some more about the topic of communication. Of course this is the crucial question in all user/librarian relationships. The user's ability to translate his needs into the language of the library (librarian) will depend upon a number of factors. First there is the user's ability to express his needs verbally, then there is a problem of to what extent the vocabulary of the library matches his requirements and the assistance given by the library (librarian). Many people still have a long way to go before they will even be able to ask what libraries are doing and for what purpose. If we were to answer such a question we might perhaps use another picture. (See figure 3)

AIMS FOR USER INSTRUCTION

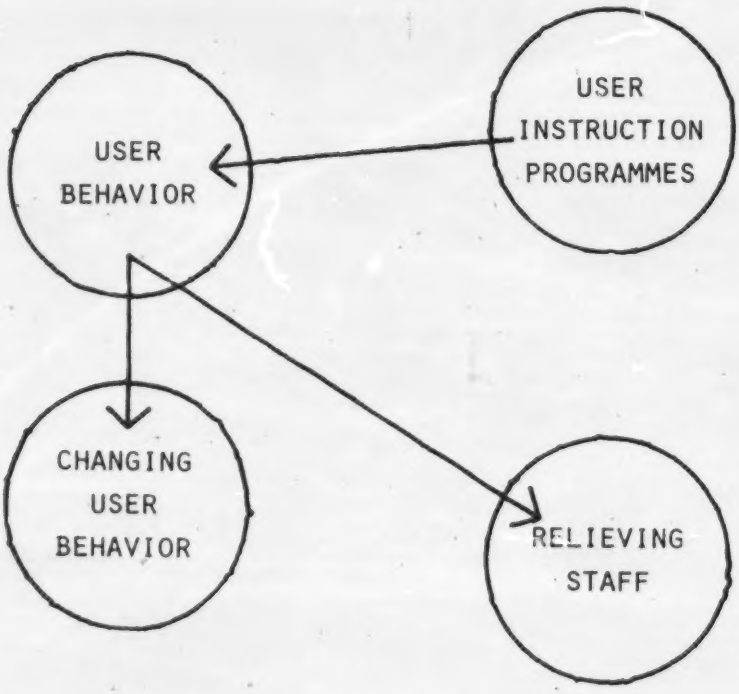

Fig.3.

Ranganathan spoke about "save the time of the reader". So far, so good. What we should not forget is that most people within our library's boundaries probably will not be library users at all, and what is more important, they seem to be doing fine. To put it another way: Lots of happy people in this world don't have any library service at all. Experience seems to indicate that information leaflets about opening hours and nicely drawn maps of the library shelves with Dewey-number, for this group (formerly called potential users) will have minor effects. I also suspect that for ninety percent of the students the same goes for guided tours and numerous tape/slide presentations. I am not saying that they should be abandoned, but I am strongly advocating an evaluation which takes into account the total framework of library services. I do see the good sides of many of the programmes mentioned above but a too narrow handling of the matter would be like curing leprosy by using cosmetics. One should not expect too much in the long run.

Still as I indicated in the beginning of this paper, I am optimistic for the future. I have mentioned the developments in the educational systems where the libraries are becoming an ever more integrated part. So, what do we do now? Well, we could sum up in a checklist like the following for ourselves to find out:

1. Who are the users?
2. What is our message to the users, what do we want them to learn?
3. What do we want to achieve?
4. How do we do it?
5. With which tools?
6. How do we measure the processes and the results?
7. How and what to evaluate?
8. How do we start again?

And while we ponder over this there is all the time the encouragement from seeing that more and more we are designing libraries for human use and organising information retrieval for human beings. And as we learn more about it, the library itself is also designed in a more self-explanatory way. Like the city we gradually learn to know from living in it, some faster and better than others, others again hardly knowing more than their own neighbourhood, - with street names, numbers, parks, public baths, sports grounds - and maps for it, and of course libraries.

References:

1. Intergovernmental Conference on the Planning of National Documentation, Library and Archives Infrastructures. Paris, 23-27 Sept. 1974. Final report, Paris, Unesco, 1975.

2. Vogel, J. T."A critical overview of the evaluation of library instruction". (In Drexel library quarterly, Vol.8 (1972) 3, p. 315-23

PANEL DISCUSSION November 4 1976

Sven Westberg (Chairman)

The final afternoon of the seminar started with a lively discussion between representatives from:

Denmark	Birgitte Lau
England	Malcolm Stevenson
Finland	Ritva Sievänen-Allen
Norway	Ben Rugaas
Sweden	Nancy Fjällbrant

The themes for discussion were:

1. The role of user education in the wider framework of library services.

2. The need for user education in education for librarianship.

The panel had some difficulties with agreement on definitions of terms, but there was general agreement that user education should be an integrated part of the functions of the library and that greater emphasis should be placed on this in the training of librarians. Discussion was so lively that it was hard to keep within the time limits imposed by the programme.

Final Discussion November 3 1976

RECOMMENDATIONS FROM THE NVBF ANGLO-SCANDINAVIAN SEMINAR ON USER EDUCATION

Sven Westberg (Chairman)

A final summing up discussion on the NVBF Anglo-Scandinavian Seminar on User Education was held. This discussion resulted in a number of recommendations:

1. The papers presented at the seminar should be published as soon as possible, in the form of a CTHB-publikation. The approximate price of this will be 20.Skr.

2. A central reference collection of library user education material should be set up. This should include:
   (a) teaching material
   (b) papers/articles on user education
   It was suggested that this collection should be established at Chalmers University Library. Project Catalogues and bibliographies should be produced and distributed. It was suggested that collection of material should be encouraged by means of a circular to be distributed to the academic libraries and library schools in the Scandinavian countries.

3. The Seminar wished to recommend to NVBF the formation of a Nordic Committee on Library User Education.

4. The Seminar suggested that NVBF should try to obtain financial support for these projects, for example from NORDINFO.

SOME PEOPLE
ARE NEVER
SATISFIED
S.W

CHALMERS TEKNISKA HÖGSKOLAS BIBLIOTEK - CTHB

Chalmers tekniska högskolas bibliotek. Publikationer

1. Fjällbrant, Nancy, Vetenskaplig kommunikation . 2 rev. uppl. 1975. 18 s.

2. Fjällbrant, Nancy, Datorbaserad informationssökning - en introduktion. Göteborg 1974. 27 s.

3. Fjällbrant, Nancy, & Reimer-Jönsson, Ulla, Litteraturvägledning inom maskinteknik. 2 rev. uppl. Göteborg 1976.

4. Fjällbrant, Nancy, & Reimer-Jönsson, Ulla, Litteraturvägledning inom byggnadsteknik. Rev. utg. Göteborg 1975. 118 s.

5. Reimer-Jönsson, Ulla, Litteraturvägledning inom arkitektur. Göteborg 1974. 108 s.

6. Fjällbrant, Nancy, Litteraturvägledning inom elektroteknik. Göteborg 1974. 101 s.

7. Fernholm, Helena, Fjällbrant, Nancy, & Reimer-Jönsson, Ulla, Litteraturvägledning inom fysik. Göteborg 1974. 88 s.

8. Berntler, Lena, Fjällbrant, Nancy, & Reimer-Jönsson, Ulla, Litteraturvägledning inom geologi. Göteborg 1975. 68 s.

9. Fjällbrant, Nancy, Att ordna referenser och presentera resultat: en vägledning för doktorander och andra forskare Göteborg 1975. 39 s. ill.

10. Fjällbrant, Nancy, A study of user behaviour and needs at Chalmers University of Technology Library. Göteborg 1976. 58 s. (+ appendix).

11. Fjällbrant, Nancy, A study of user behaviour and needs at the Biomedical Section of Gothenburg University Library. Göteborg 1976. 48 s. (+ appendix).

12. Proceedings of the NVBF's Anglo-Scandinavian Seminar on Library User Education. Nov. 2-4, 1976. Göteborg 1977. 141 s.

13. Fjällbrant, Nancy, & Westberg, S., Chalmersbiblioteket. Målsättning. Funktioner. Långsiktsplanering. Göteborg 1977. 16 s.